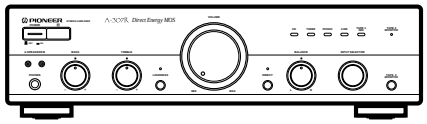
PIONEER®
The Art of Entertainment

Service Manual



The illustration shows the A-307R.

ORDER NO.
RRV1912

STEREO AMPLIFIER

A-307R
A-207R

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model		Power Requirement	The voltage can be converted by the following method.
	A-307R	A-207R		
MYXJ/EW	◯	◯	AC220-230V	——
MYXJ/GR	◯	◯	AC220-230V	——
MVXJ	–	◯	AC220-230V	——
SAMXJ	◯	–	AC110V/120-127V/220V/240V	With the voltage selector
SDXJ	◯	–	AC110V/120-127V/220V/240V	With the voltage selector

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1. SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

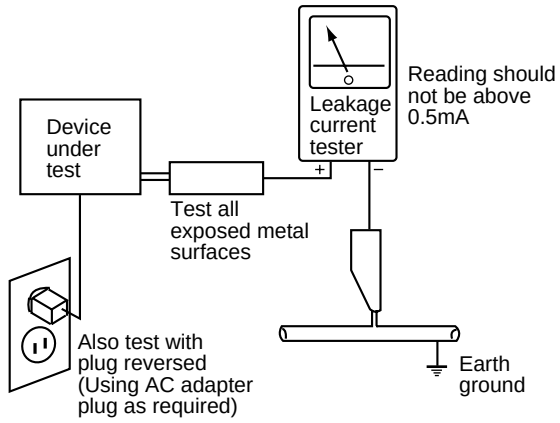
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Reading should not be above 0.5mA
Leakage current tester
+
–
Device under test
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

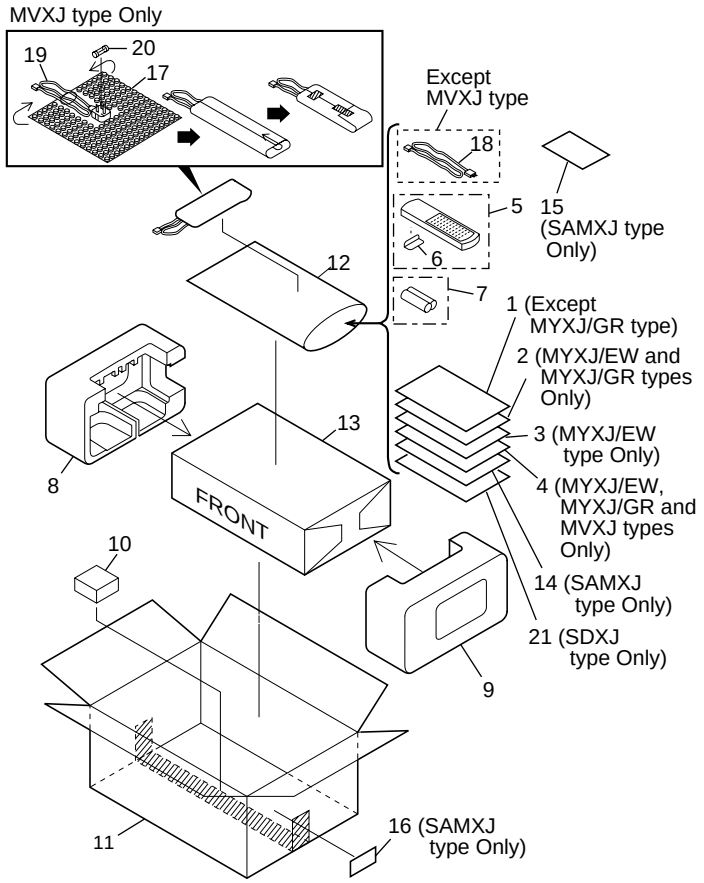
Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS AND PARTS LIST

NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
● *Screws adjacent to ▼ mark on the product are used for disassembly.*

2.1 PACKING



(1) PACKING PARTS LIST

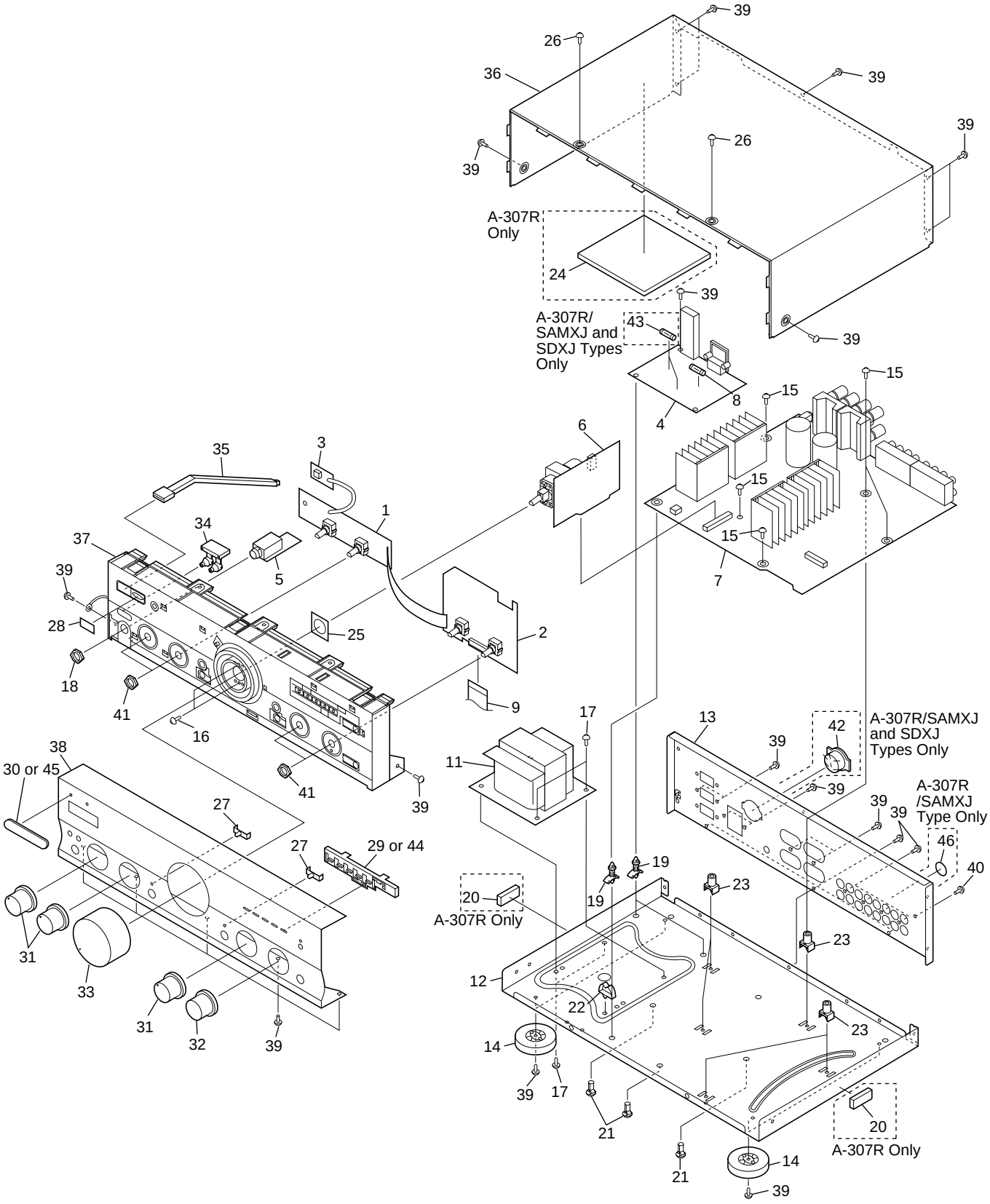
Mark	No.	Description	Part No.
	1	Operating Instructions (English)	See Contrast table(2)
	2	Operating Instructions (German)	See Contrast table(2)
	3	Operating Instructions (French/Italian/Dutch/Swedish/Spanish/Portugese)	See Contrast table(2)
NSP	4	Warranty Card	See Contrast table(2)
	5	Remote Control Unit (CU-A014)	AXD7163
	6	Battery Cover	AZN2249
NSP	7	Dry Cell Battery (R6P,AA)	VEM-013
	8	Side Pad L	AHA7205
	9	Side Pad R	AHA7206
	10	Sub Pad	AHA7218
	11	Packing Case	See Contrast table(2)
NSP	12	Literature Bag	AHG1180
	13	Packing Sheet	AHG7015
	14	Operating Instructions (Chinese)	See Contrast table(2)
	15	Caution Label 220V	See Contrast table(2)
	16	Case Label	See Contrast table(2)
NSP	17	Air Cap	See Contrast table(2)
⚠	18	Power Cord	See Contrast table(2)
⚠	19	Power Cord with Fuse	See Contrast table(2)
⚠	20	Fuse (T5A)	See Contrast table(2)
	21	Operating Instructions (Spanish/Chinese)	See Contrast table(2)

(2) CONTRAST TABLE

A-307R/MYXJ/EW, MYXJ/GR, SAMXJ, SDXJ, A-207R/MYXJ/EW, MYXJ/GR and MVXJ are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.							Remarks
			A-307R				A-207R			
			MYXJ/EW	MYXJ/GR	SAMXJ	SDXJ	MYXJ/EW	MYXJ/GR	MVXJ	
	1	Operating Instructions (English)	ARB7138	Not used	ARB7142	ARB7142	ARB7138	Not used	ARB7138	
	2	Operating Instructions (German)	ARC7183	ARC7183	Not used	Not used	ARC7183	ARC7183	Not used	
	3	Operating Instructions (French/Italian/Dutch/Swedish/Spanish/Portuguese)	ARC7184	Not used	Not used	Not used	ARC7184	Not used	Not used	
NSP	4	Warranty Card	ARY7009	ARY7009	Not used	Not used	ARY7009	ARY7009	ARY7009	
	11	Packing Case	AHD7563	AHD7563	AHD7581	AHD7564	AHD7561	AHD7561	AHD7561	
	14	Operating Instructions (Chinese)	Not used	Not used	ARC7186	Not used	Not used	Not used	Not used	
	15	Caution Label 220V	Not used	Not used	ARR1003	Not used	Not used	Not used	Not used	
	16	Case Label	Not used	Not used	ARW7032	Not used	Not used	Not used	Not used	
NSP	17	Air Cap	Not used	Not used	Not used	Not used	Not used	Not used	AHG1087	
⚠	18	Power Cord	ADG1154	ADG1154	ADG7018	ADG1158	ADG1154	ADG1154	Not used	
⚠	19	Power Cord with Fuse	Not used	Not used	Not used	Not used	Not used	Not used	ADG1156	
⚠	20	Fuse (T5A)	Not used	Not used	Not used	Not used	Not used	Not used	AEK1046	
	21	Operating Instructions (Spanish/Chinese)	Not used	Not used	Not used	ARC7185	Not used	Not used	Not used	

2.2 EXTERIOR


39
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A-307R
Only
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A-307R/
SAMXJ and
SDXJ Types
Only
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42
A-307R/SAMXJ
and SDXJ
Types Only
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11
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30 or 45
41
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39
A-307R
/SAMXJ
Type Only
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46
27
29 or 44
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20
A-307R Only
23
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39
39
17
21
20
A-307R Only
21
14
39

(1) EXTERIOR PARTS LIST

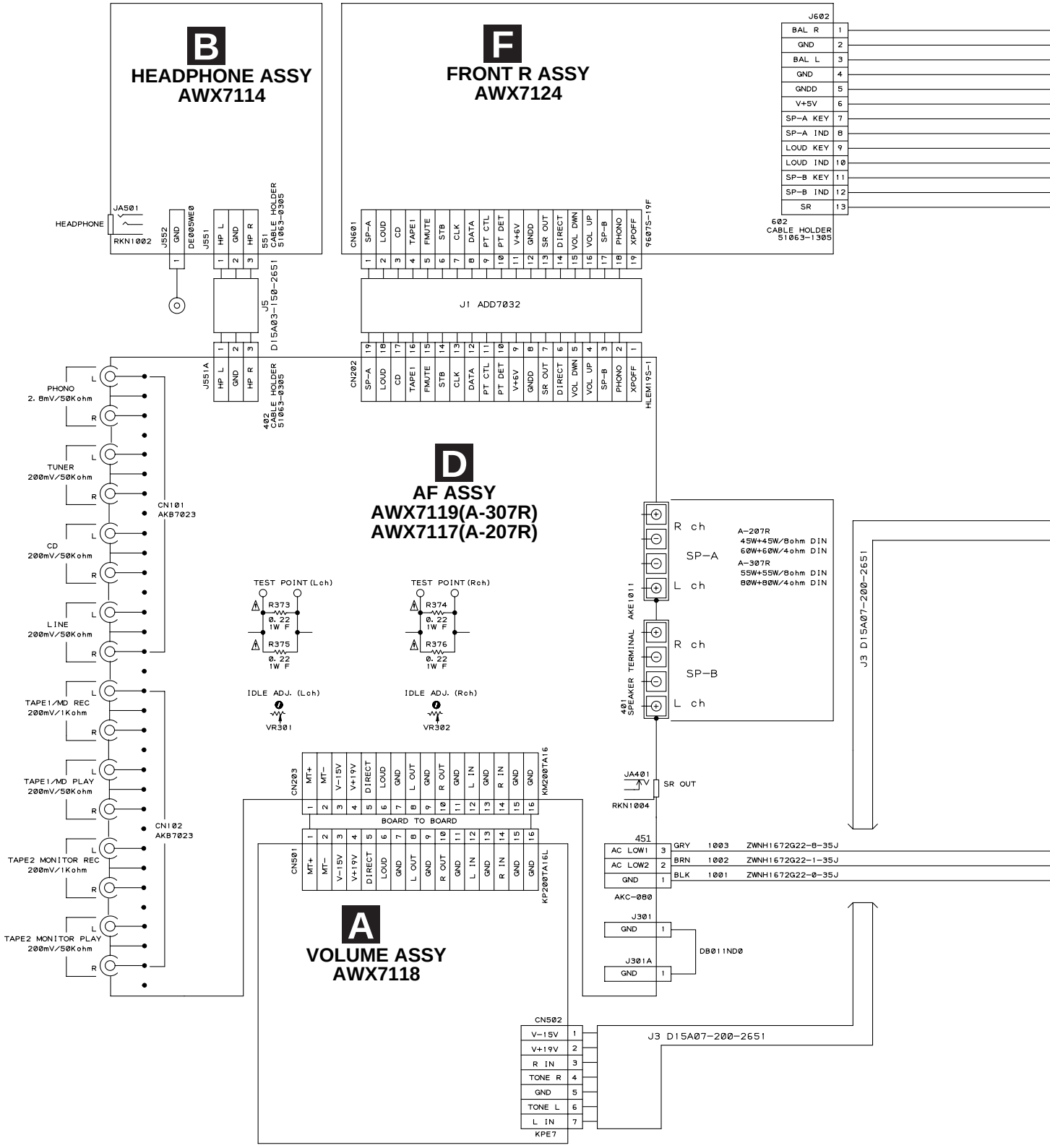
Mark	No.	Description	Part No.
	1	FRONT L Assy	AWX7123
	2	FRONT R Assy	AWX7124
	3	OPT Assy	AWX7125
	4	AC PRIMARY Assy	See Contrast table(2)
NSP	5	HEADPHONE Assy	AWX7114
	6	VOLUME Assy	AWX7118
	7	AF Assy	See Contrast table(2)
⚠	8	Fuse (FU1)	See Contrast table(2)
	9	Flexible Cable (19P) (AF CN202-FRONT R CN601)	ADD7032
	10	• • • • •	
⚠	11	Power Transformer (T1)	See Contrast table(2)
NSP	12	Chassis	ANA7064
	13	Rear Panel	See Contrast table(2)
	14	Insulator	PNW2766
	15	Screw	ABA1018
	16	Screw	ABA1027
	17	Screw (4 × 10)	ABA7047
	18	Nut	ABN-065
	19	PCB Support	AEC7006
	20	Rubber Spacer	See Contrast table(2)
NSP	21	PCB Holder	AEC7057
NSP	22	Cord Clamp F	AEC7134
	23	PCB Mold	AMR2533
NSP	24	Damping Plate	See Contrast table(2)
NSP	25	Shield Plate	ANK7043
	26	Screw	PBA1096
	27	LED Lens	AAK2459
	28	IR Filter	AAK7532
	29	LED Lens T	See Contrast table(2)
	30	Name Plate	See Contrast table(2)
	31	Rotary Knob A	AAB7148
	32	Rotary Knob B	AAB7149
	33	Volume Knob	AAB7150
	34	Speaker Button	AAD7435
	35	Power Joint	AAD7439
	36	Bonnet Case	ANE7183
	37	Panel Base	AMB7489
	38	Front Panel	See Contrast table(2)
	39	Screw	BBZ30P080FZK
	40	Screw	BCZ30P060FCC
	41	Nut	NK90FUC
⚠	42	Voltage Selector (S2)	See Contrast table(2)
⚠	43	Fuse (FU2, FU3 : 2A)	See Contrast table(2)
	44	LED Lens A	See Contrast table(2)
	45	PIONEER Badge	See Contrast table(2)
	46	Label (Rear Base)	See Contrast table(2)

(2) CONTRAST TABLE

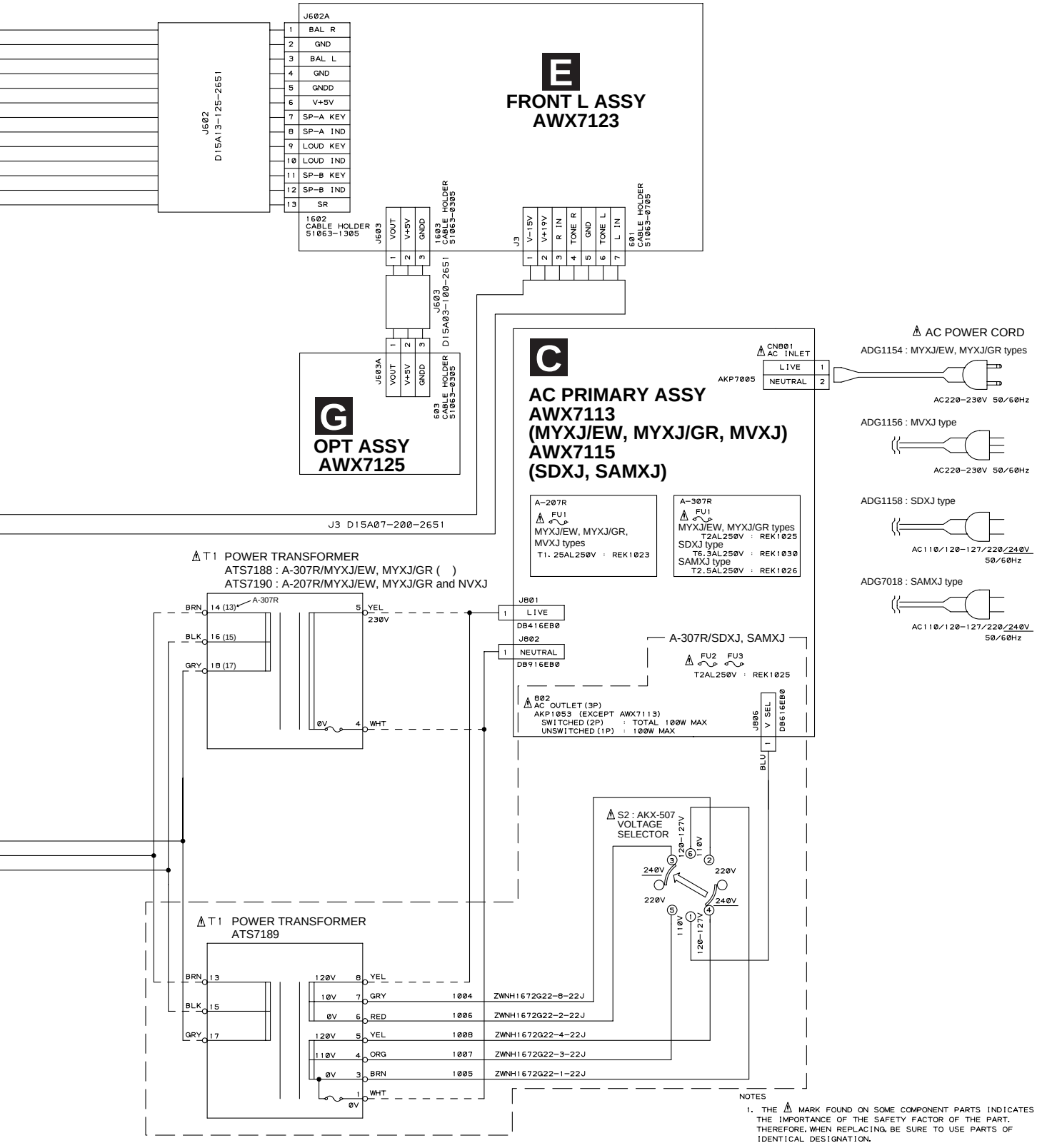
A-307R/MYXJ/EW, MYXJ/GR, SAMXJ, SDXJ, A-207R/MYXJ/EW, MYXJ/GR and MVXJ are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.							Remarks
			A-307R				A-207R			
			MYXJ/EW	MYXJ/GR	SAMXJ	SDXJ	MYXJ/EW	MYXJ/GR	MVXJ	
	4	AC PRIMARY Assy	AWX7113	AWX7113	AWX7115	AWX7115	AWX7113	AWX7113	AWX7113	
	7	AF Assy	AWX7119	AWX7119	AWX7119	AWX7119	AWX7117	AWX7117	AWX7117	
⚠	8	Fuse (FU1 : 2A)	REK1025	REK1025	Not used	Not used	Not used	Not used	Not used	
⚠	8	Fuse (FU1 : 2.5A)	Not used	Not used	REK1026	Not used	Not used	Not used	Not used	
⚠	8	Fuse (FU1 : 6.3A)	Not used	Not used	Not used	REK1030	Not used	Not used	Not used	
⚠	8	Fuse (FU1 : 1.25A)	Not used	Not used	Not used	Not used	REK1023	REK1023	REK1023	
⚠	11	Power Transformer (T1 : AC220-230V)	ATS7188	ATS7188	Not used	Not used	ATS7190	ATS7190	ATS7190	
⚠	11	Power Transformer (T1 : AC110V/120-127V/220V/240V)	Not used	Not used	ATS7189	ATS7189	Not used	Not used	Not used	
	13	Rear Panel	ANC7643	ANC7643	ANC7645	ANC7644	ANC7639	ANC7639	ANC7639	
	20	Rubber Spacer	AEC7034	AEC7034	AEC7034	AEC7034	Not used	Not used	Not used	
NSP	24	Damping Plate	AMR7216	AMR7216	AMR7216	AMR7216	Not used	Not used	Not used	
	29	LED Lens T	AAK7544	AAK7544	AAK7544	AAK7544	Not used	Not used	Not used	
	30	Name Plate	AAM7004	AAM7004	AAM7004	AAM7004	Not used	Not used	Not used	
	38	Front Panel	ANB7114	ANB7114	ANB7114	ANB7114	AMB7493	AMB7493	AMB7493	
⚠	42	Voltage Selector (S2)	Not used	Not used	AKX-507	AKX-507	Not used	Not used	Not used	
⚠	43	Fuse (FU2, FU3 : 2A)	Not used	Not used	REK1025	REK1025	Not used	Not used	Not used	
	44	LED Lens A	Not used	Not used	Not used	Not used	AAK7537	AAK7537	AAK7537	
	45	PIONEER Badge	Not used	Not used	Not used	Not used	PAM1755	PAM1755	PAM1755	
	46	Label (Rear Base)	Not used	Not used	PRW1499	Not used	Not used	Not used	Not used	

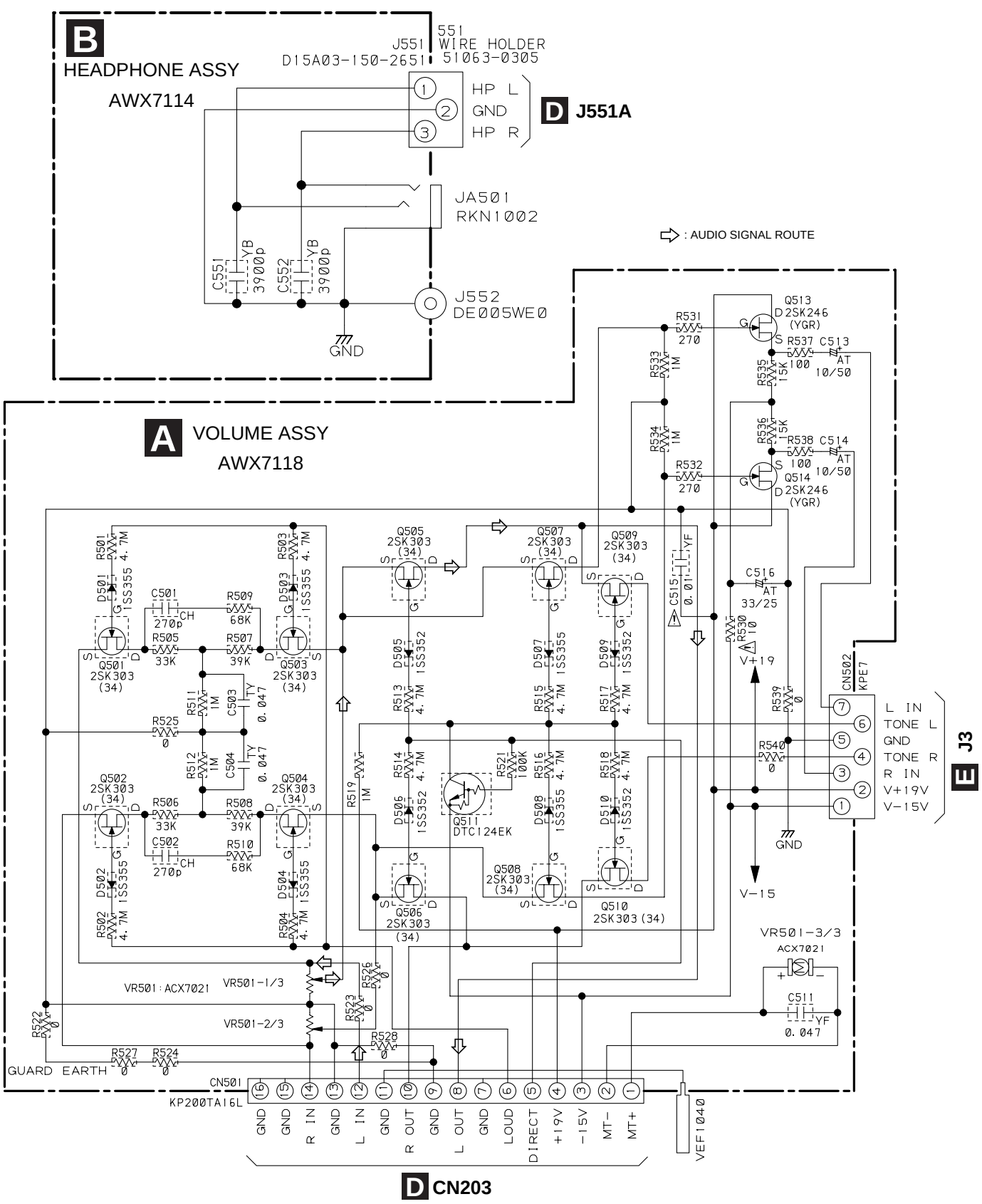
3. SCHEMATIC DIAGRAM
3.1 OVERALL CONNECTION DIAGRAM



Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".



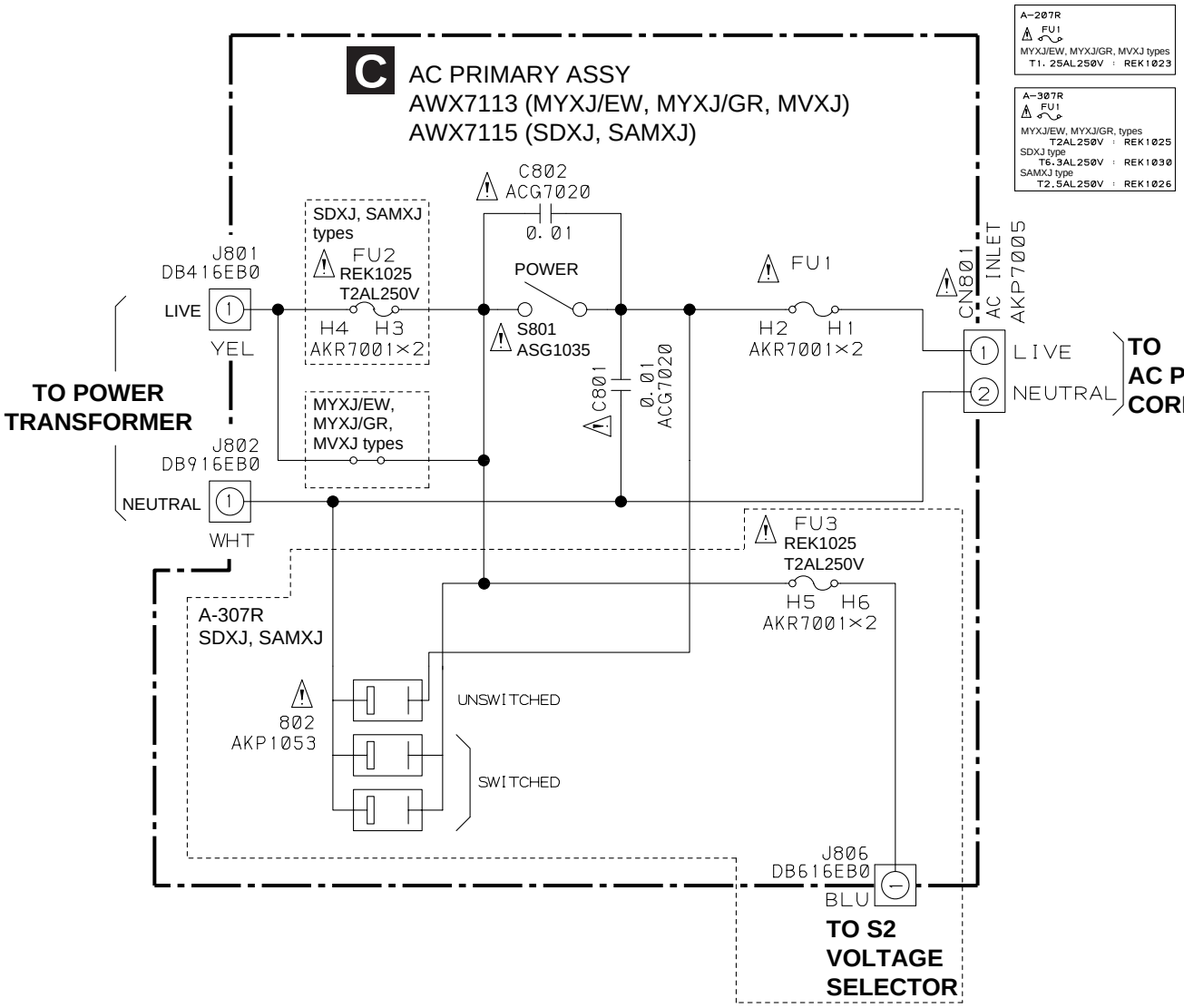
3.2 VOLUME AND HEADPHONE ASSEMBLIES



3.3 AC PRIMARY ASSY

• NOTE FOR FUSE REPLACEMENT

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.
REPLACE WITH SAME TYPE AND RATINGS ONLY.



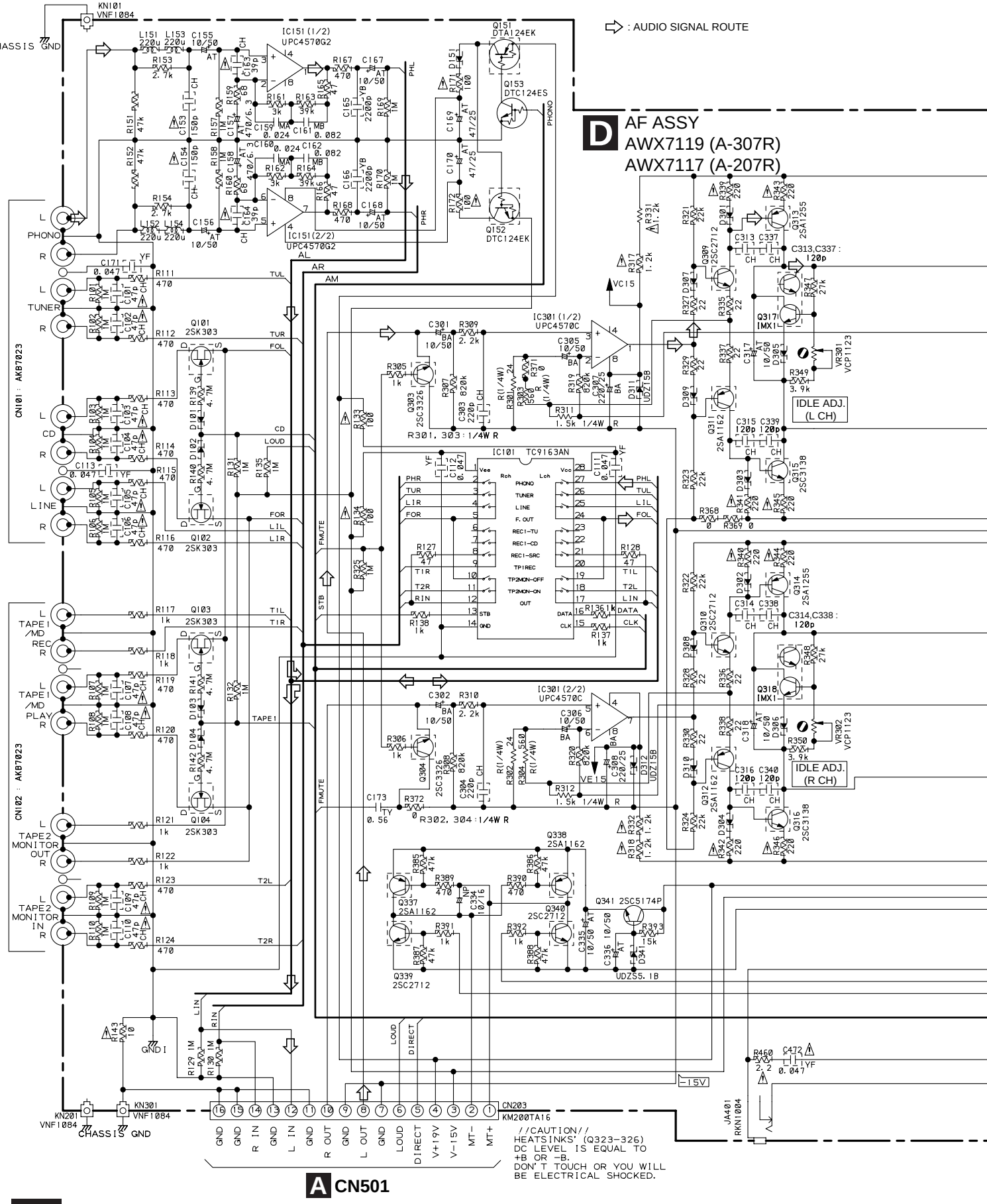
NOTES

1. RESISTORS
INDICATED IN Ohm 1/10W 5% TOLERANCE UNLESS OTHERWISE NOTED
k : kOhm, M : MOhm

2. CAPACITORS
INDICATED IN CAPACITY(uF)/VOLTAGE(V) UNLESS OTHERWISE NOTED p : pF
INDICATED WITHOUT VOLTAGE IS 50V EXCEPT ELECTROLYTIC CAPACITOR.
TY : CFTYA, CH : CCSQCH, YB : CKSQYB, YF : CKSQYF

3. THE ⚠ MARK FOUND ON SOME COMPONENT PARTS INDICATES THE IMPORTANCE OF THE SAFETY FACTOR OF THE PART. THEREFORE, WHEN REPLACING, BE SURE TO USE PARTS OF IDENTICAL DESIGNATION.

3.4 AF ASSY


: AUDIO SIGNAL ROUTE
D AF ASSY
AWX7119 (A-307R)
AWX7117 (A-207R)
KN101 VNF1084
CHASSIS GND
IC151(1/2) UPC4570G2
IC151(2/2) UPC4570G2
Q151 DTA124EK
Q153 DTC124ES
Q152 DTC124EK
PHONO
TUNER
CD
LINE
TAPE1 /MD REC
TAPE1 /MD PLAY
TAPE2 MONITOR OUT
TAPE2 MONITOR IN
CN101 : AKB7023
CN102 : AKB7023
Q101 2SK303
Q102 2SK303
Q103 2SK303
Q104 2SK303
IC101 TC9163AN
IC301(1/2) UPC4570C
IC301(2/2) UPC4570C
R301, 303 : 1/4W R
R302, 304 : 1/4W R
IDLE ADJ. (L CH)
IDLE ADJ. (R CH)
C313,C337 : 120p
C314,C338 : 120p
Q317 IMX1
Q318 IMX1
Q337 2SA1162
Q338 2SA1162
Q339 2SC2712
Q340 2SC2712
Q341 2SC5174P
KN201 VNF1084
KN301 VNF1084
CHASSIS GND
GND1
CN203 KM200TA16
GND GND R IN GND L IN GND R OUT GND L OUT GND LOUD DIRECT V+19V V-15V MT- MT+
//CAUTION// HEATSINKS' (Q323-326) DC LEVEL IS EQUAL TO +B OR -B. DON'T TOUCH OR YOU WILL BE ELECTRICAL SHOCKED.
A CN501
JA401 RKN1004

NOTES
1. RESISTORS
INDICATED IN Ohm 1/10W ±5% TOLERANCE UNLESS OTHERWISE NOTED
k : kOhm, M : MOhm, F : NON-FRAMABLE TYPE, R : RDR TYPE
2. CAPACITORS
INDICATED IN CAPACITY(uF)/VOLTAGE(V) UNLESS OTHERWISE NOTED p : pF
INDICATED WITHOUT VOLTAGE IS 50V EXCEPT ELECTROLYTIC CAPACITOR.
MA : CQMA, MB : CQMBA, TY : CFTYA, CH : CCSQCH, SL : CCSQSL, YB : CKSQYB, YF : CKSQYF
BA : CEBA
3. INDUCTORS
INDICATED IN H ± 5%
4. DIODES
NO MARK DIODES ARE 1SS355
5. VOLTAGE
INDICATED IN DC VOLTAGE : NO SIGNAL/DIN POWER OUTPUT
(A-D3 : NO SIGNAL/80W*2ch 4ohm)
6. THE ⚠ MARK FOUND ON SOME COMPONENT PARTS INDICATES THE IMPORTANCE OF THE SAFETY FACTOR OF THE PART. THEREFORE, WHEN REPLACING, BE SURE TO USE PARTS OF IDENTICAL DESIGNATION.
7. TRNSISTOR' S RANK
2SC3138 : (OY) 2SC2712 : (OY) 2SC3326 : (AB)
2SA1255 : (OY) 2SA1162 : (OY) 2SK303 : (34)

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491001 MFD, BY LITTELFUSE INK. FOR IC454 (AEK7009).

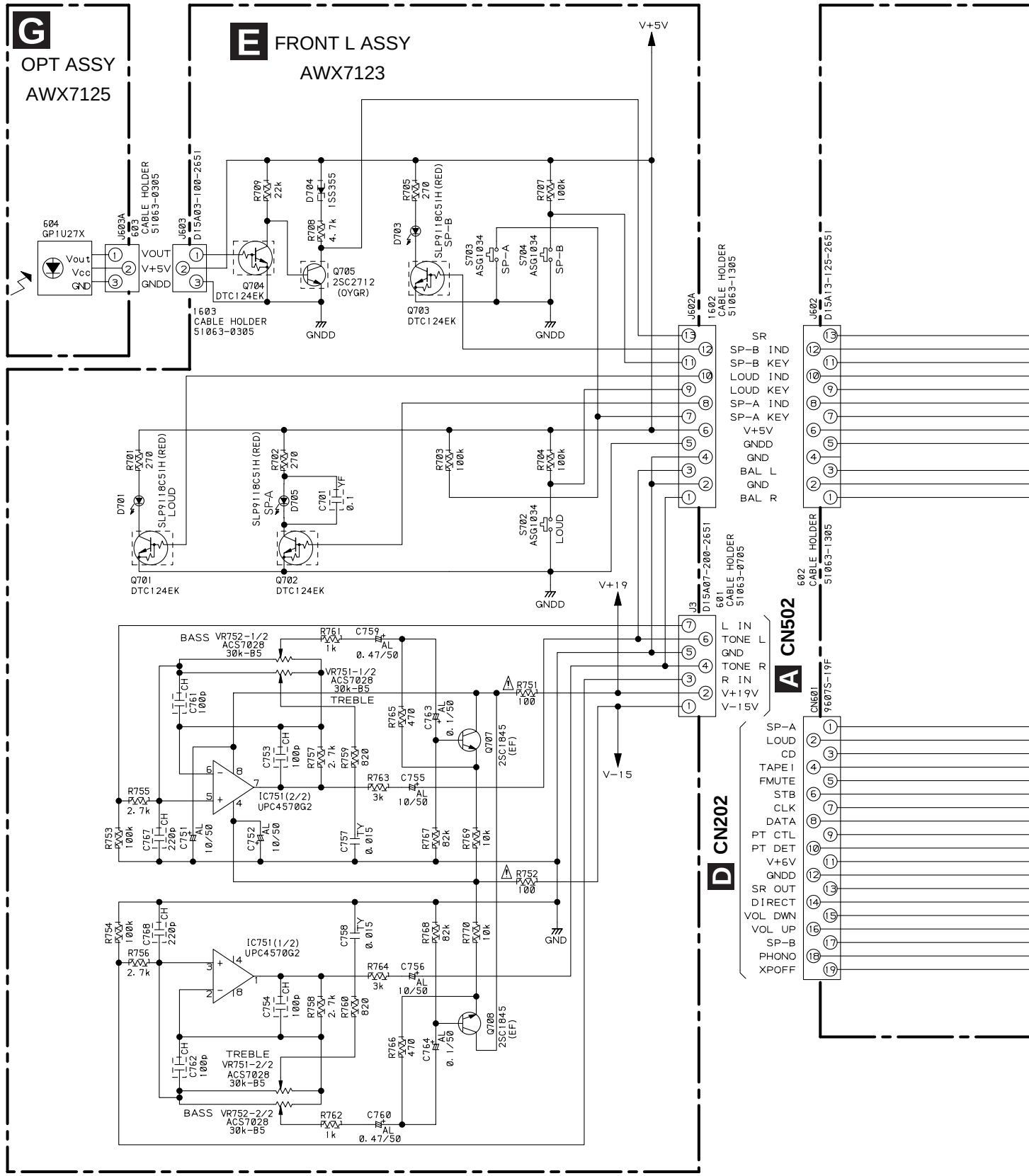
	A-307R	A-207R
C451	ACH7048 (10000/42)	ACH7080 (6800/42)
C452	ACH7049 (10000/42)	ACH7081 (6800/42)

TO POWER TRANSFORMER

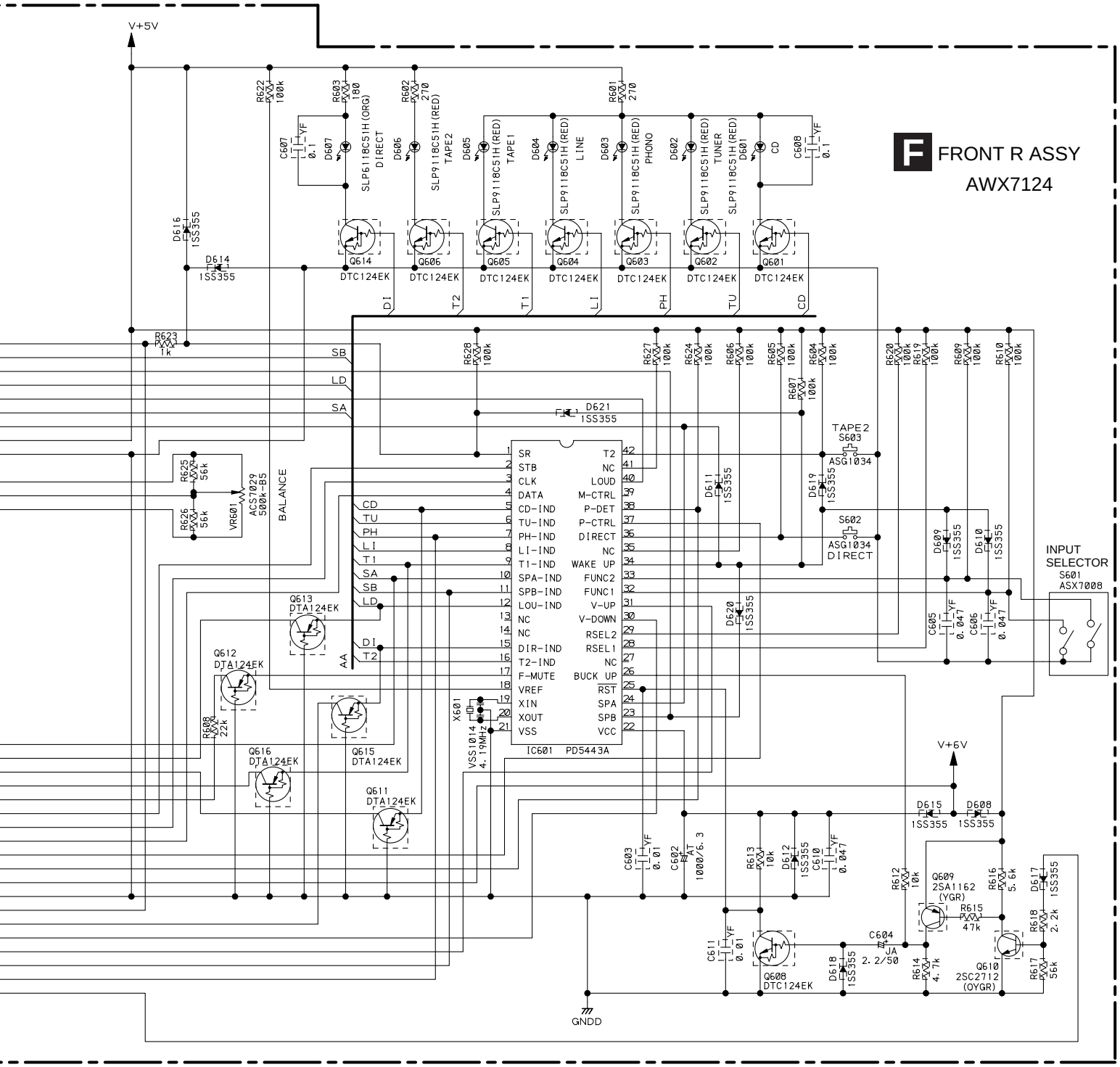
F CN601

B J551

3.5 FRON L, FRONT R AND OPT ASSEMBLIES



FRONT L ASSY
S702 : LOUDNESS
S703 : SPEAKER A
S704 : SPEAKER B



FRONT R ASSY
- S601 : INPUT SELECTOR
  - CD
  - TUNER
  - PHONE
  - LINE
  - TAPE1/MD
- S602 : DIRECT
- S603 : TAPE2 MONITOR

NOTES
1. RESISTORS
INDICATED IN Ohm 1/10W± 5% TOLERANCE UNLESS OTHERWISE NOTED
k : kOhm

2. CAPACITORS
INDICATED IN CAPACITY (uF) / VOLTAGE (V) UNLESS OTHERWISE NOTED p : pF
INDICATED WITHOUT VOLTAGE IS 50V EXCEPT ELECTROLYTIC CAPACITOR.
AL : CEAL, AT : CEAT, JA : CEJA, TY : CFTYA, CH : CCSQCH, YF : CKSQYF

3. THE ⚠ MARK FOUND ON SOME COMPONENT PARTS INDICATES THE IMPORTANCE OF THE SAFETY FACTOR OF THE PART.
THEREFORE, WHEN REPLACING, BE SURE TO USE PARTS OF IDENTICAL DESIGNATION.

4. PCB CONNECTION DIAGRAM

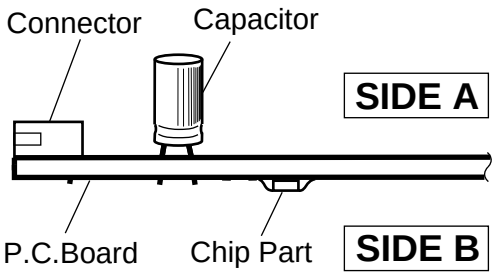
4.1 VOLUME ASSY

NOTE FOR PCB DIAGRAMS :

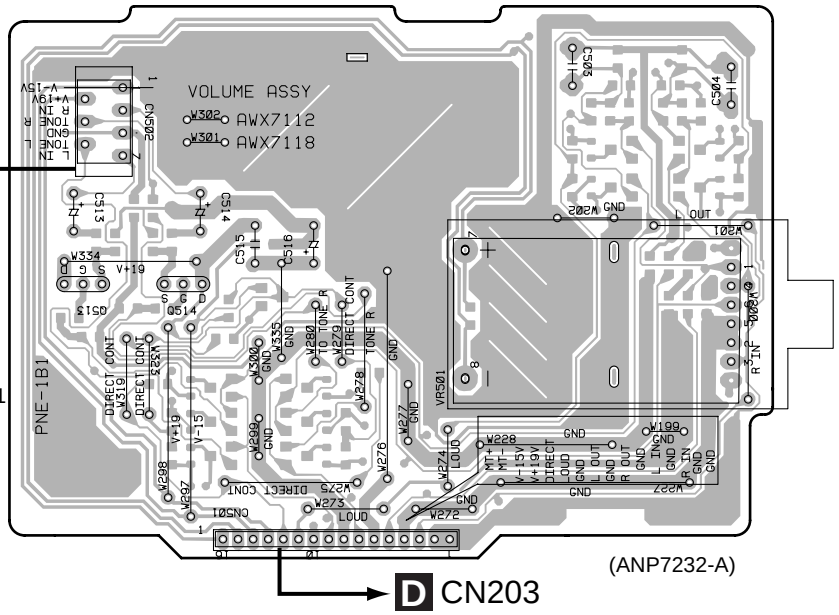
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
B C E	B C E B C E	Transistor
B C E	B C E B C E	Transistor with resistor
D G S	D G S D G S	Field effect transistor
		Resistor array
		3-terminal regulator

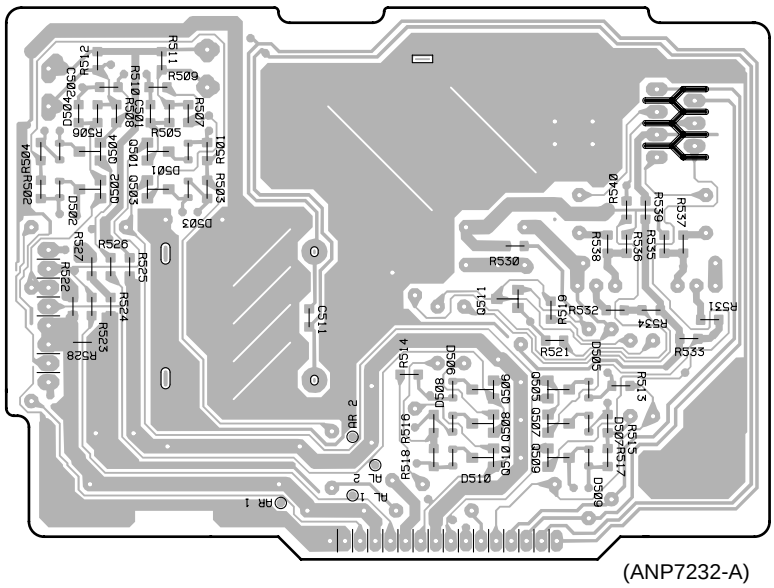
3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.



A VOLUME ASSY

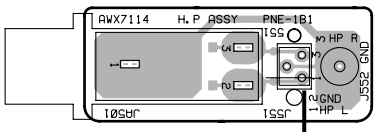


A VOLUME ASSY



4.2 HEADPHONE AND AC PRIMARY ASSEMBLIES

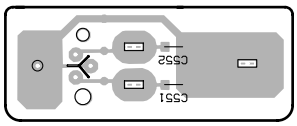
B HEADPHONE ASSY



SIDE A (ANP7232-A)

D J551A

B HEADPHONE ASSY



SIDE B (ANP7232-A)

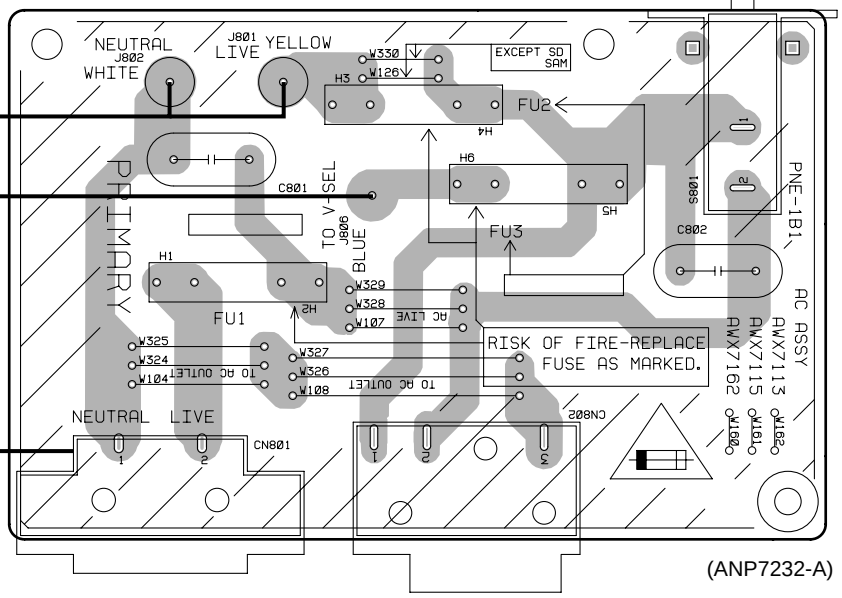
C AC PRIMARY ASSY

POWER TRANSFORMER

VOLTAGE SELECTOR (SDXJ and SAMXJ Types)

SIDE A

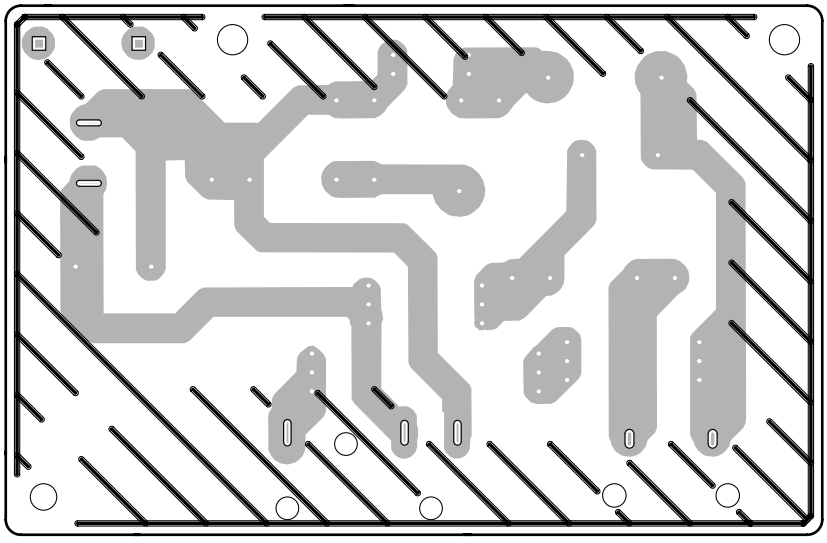
AC POWER CORD



(ANP7232-A)

C AC PRIMARY ASSY

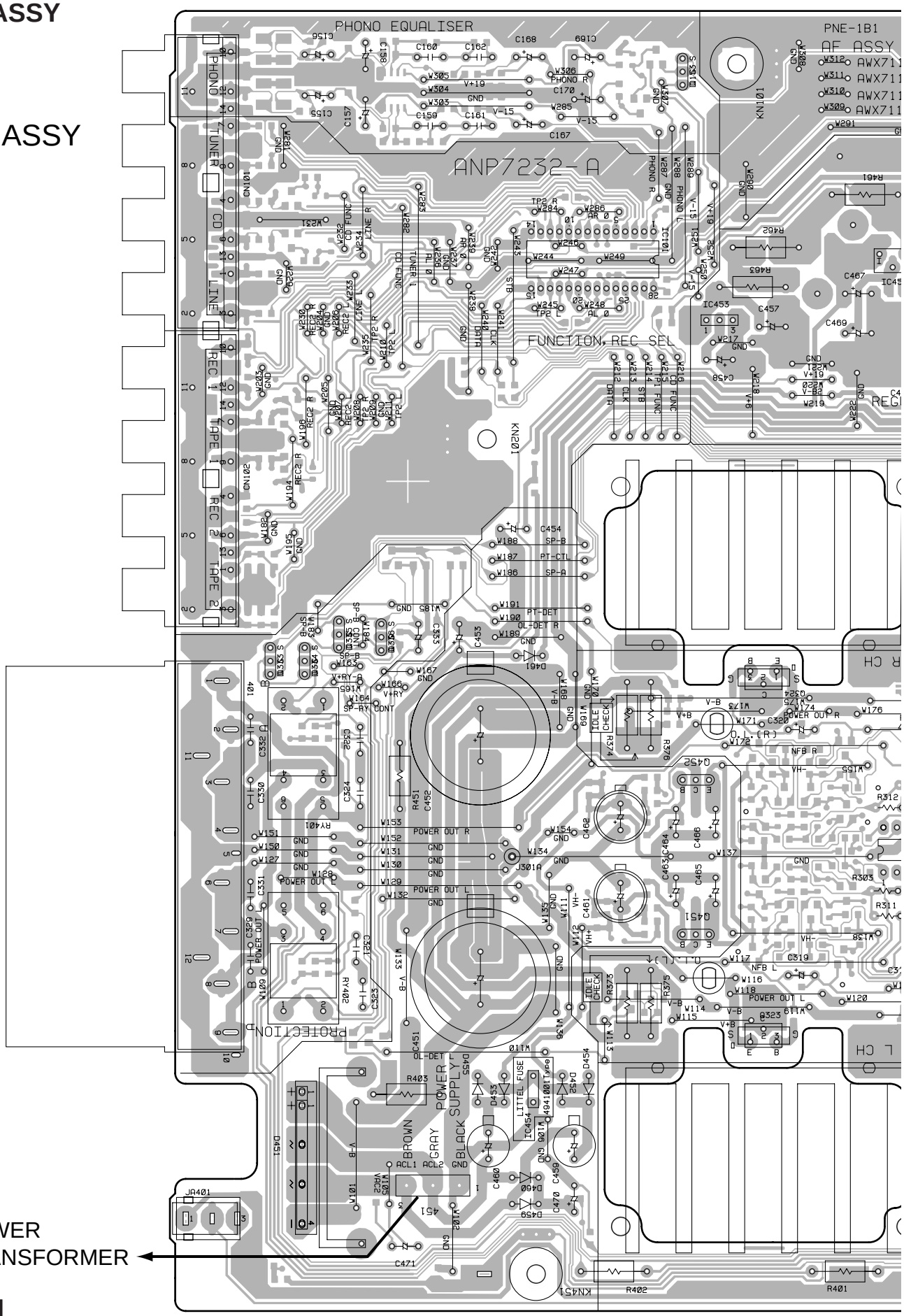
SIDE B



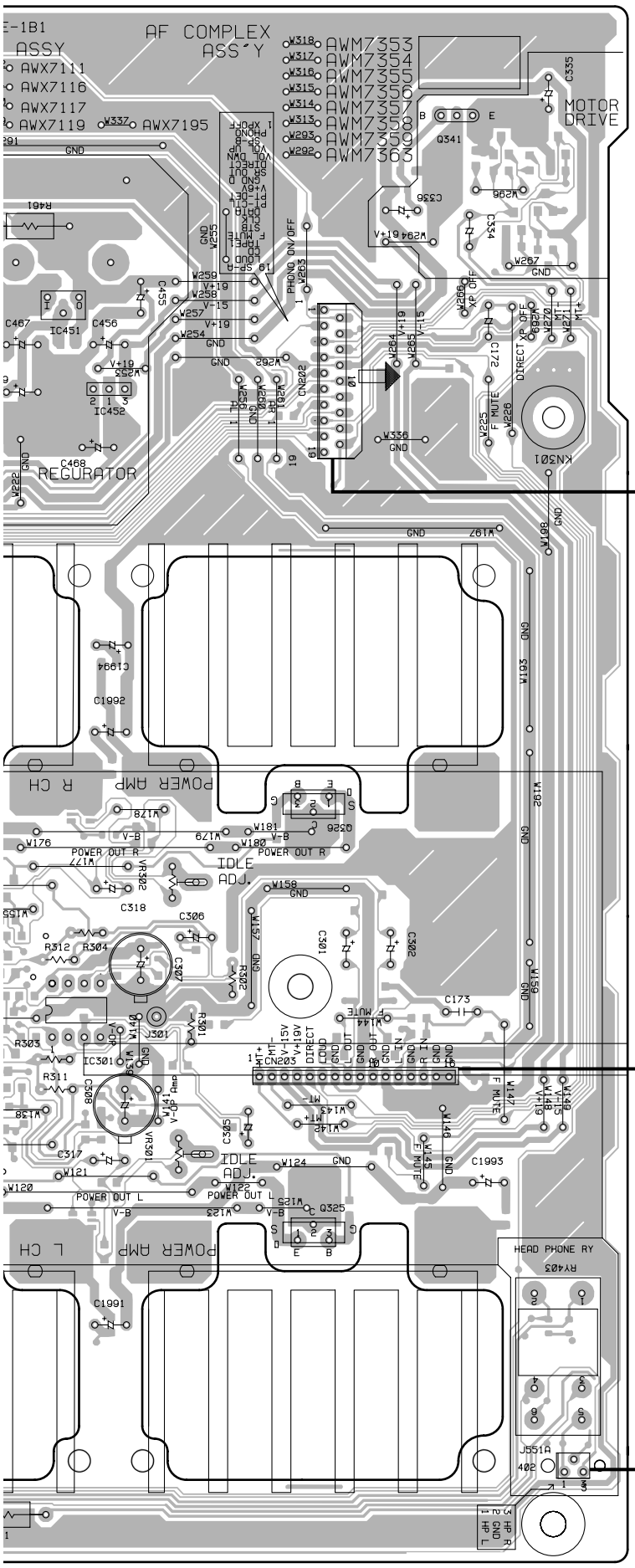
(ANP7232-A)

4.3 AF ASSY

D AF ASSY



SIDE A



(ANP7232-A)

Q153

Q341

IC101

IC451-IC453

Q333-Q336

Q324,Q326

VR302

Q452

IC301

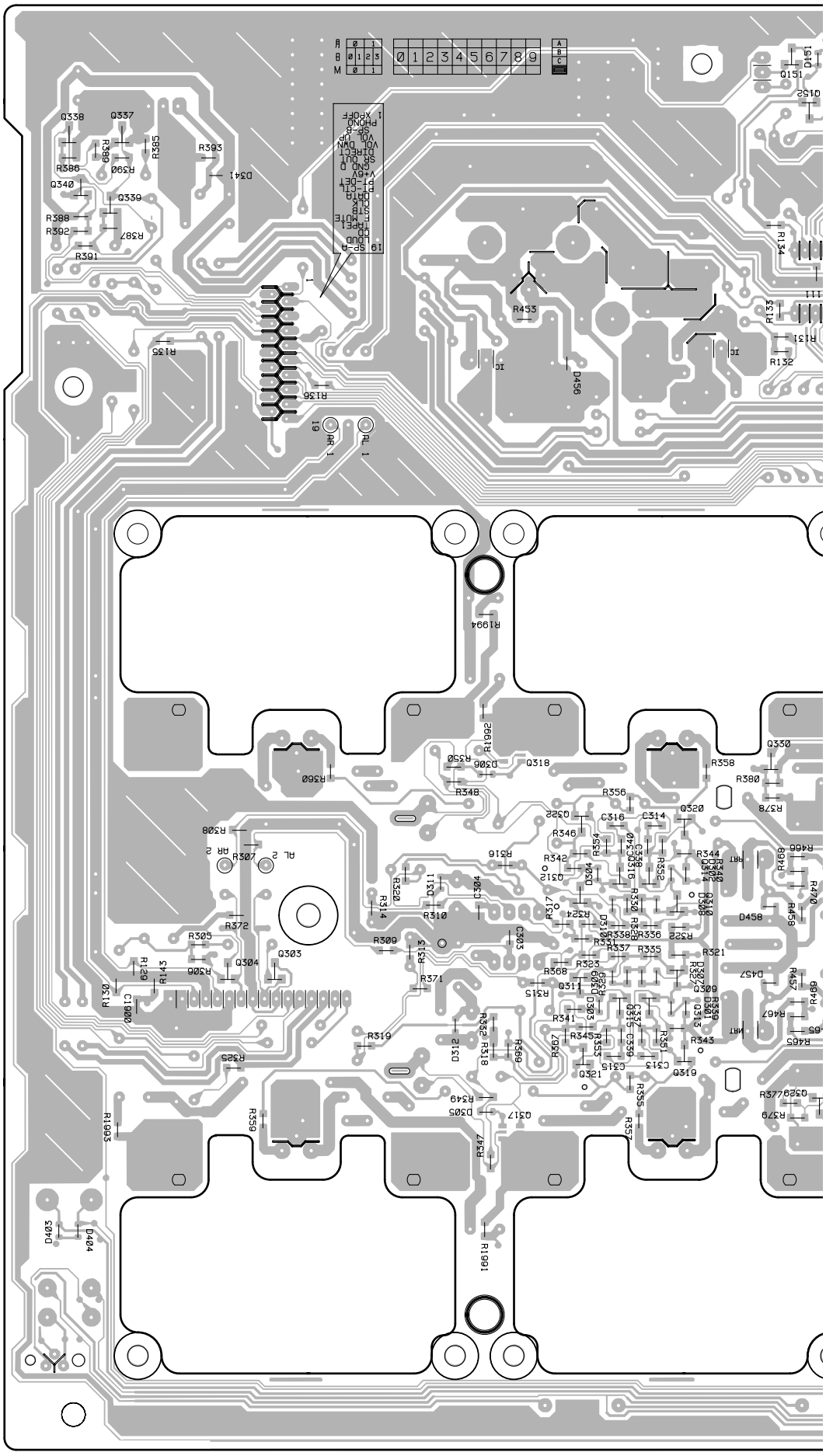
Q451

VR301

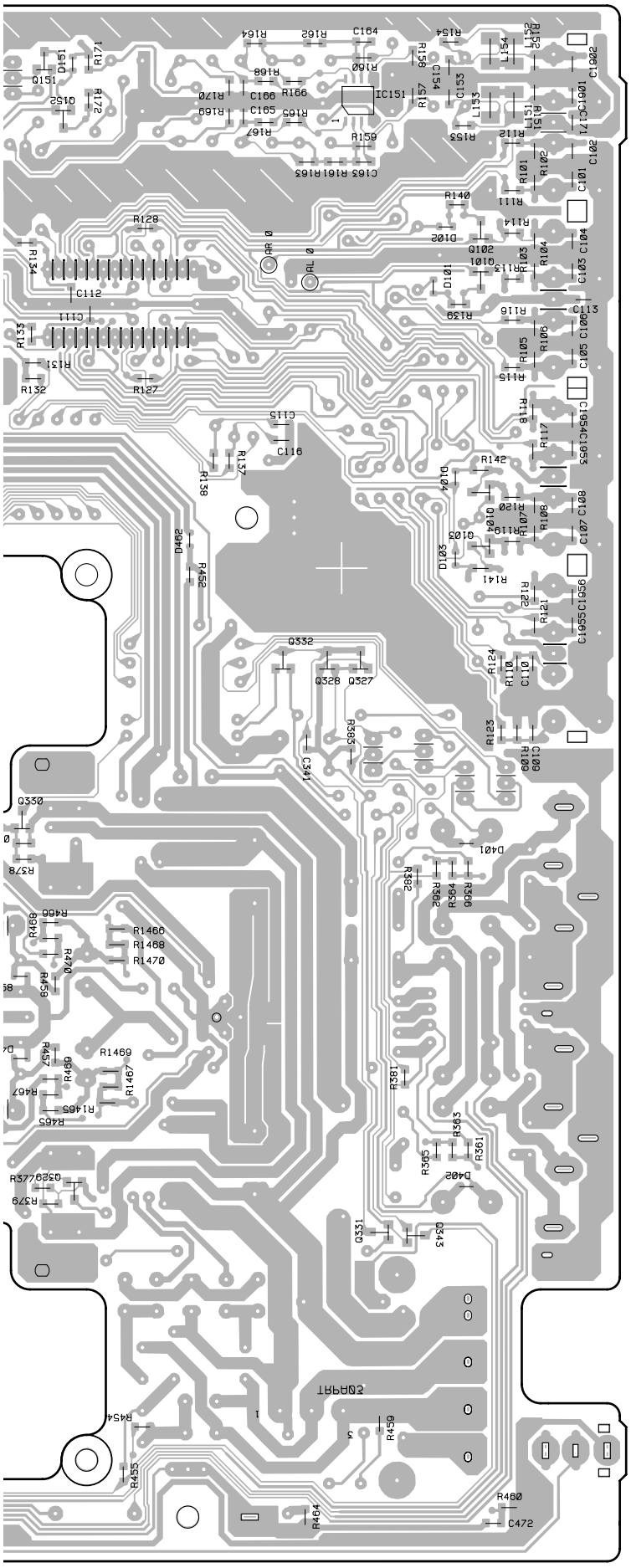
Q323,Q325

IC454

D AF ASSY



SIDE B



(ANP7232-A)

Q151
IC151
Q152
Q338,Q337

Q340,Q339

Q102

Q101

Q104

Q103

Q332
Q328,Q327

Q318,Q330

Q322,Q320

Q316,Q314

Q312,Q310

Q304,Q303
Q311,Q309
Q315,Q313

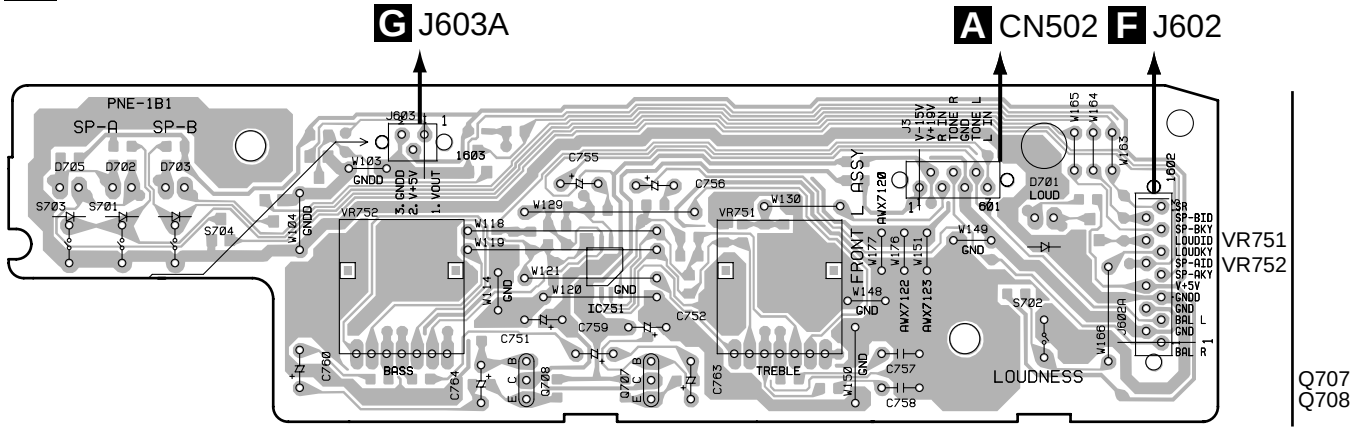
Q321,Q319

Q317,Q329

Q331,Q343

4.4 FRONT L ASSY

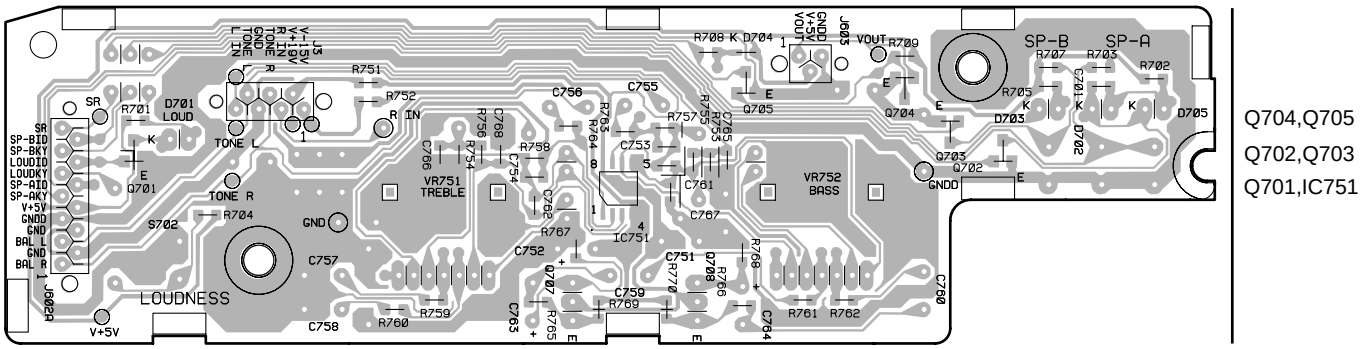
E FRONT L ASSY



(ANP7231-A)

SIDE A

E FRONT L ASSY

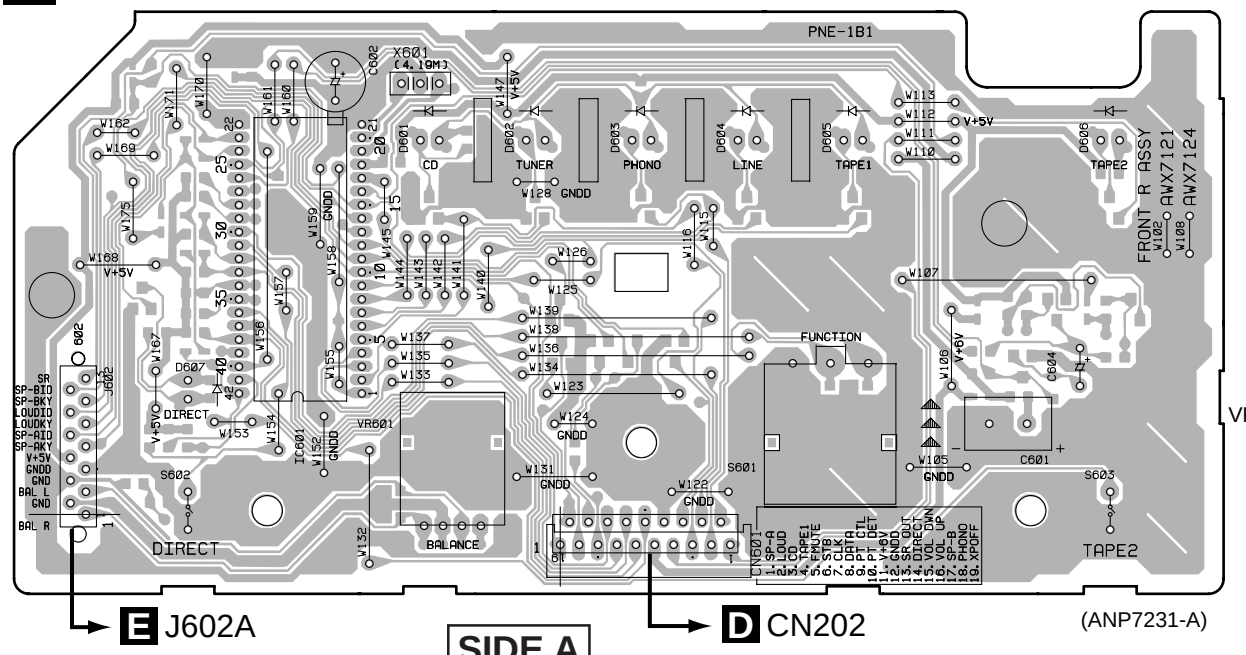


(ANP7231-A)

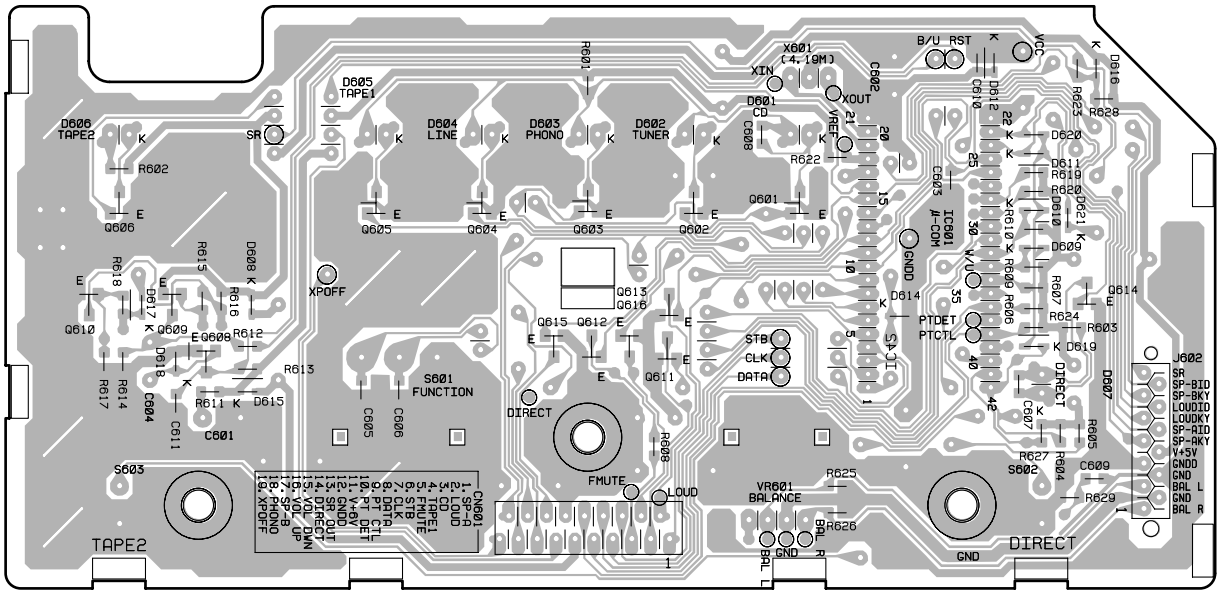
SIDE B

4.5 FRONT R AND OPT ASSEMBLIES

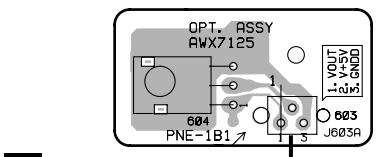
F FRONT R ASSY



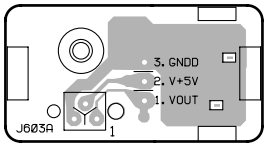
F FRONT R ASSY



G OPT ASSY



G OPT ASSY



5. PCB PARTS LIST

NOTES: ●*Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
●*The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
●*When ordering resistors, first convert resistance values into code form as shown in the following examples.*
Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).
560 Ω → 56×10^1 → 561 ..... RD1/4PU 5 6 1 J
47k Ω → 47×10^3 → 473 ..... RD1/4PU 4 7 3 J
0.5 Ω → R50 ..... RN2H R 5 0 K
1 Ω → 1R0 ..... RS1P 1 R 0 K
Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).
5.62k Ω → 562×10^1 → 5621 ..... RN1/4PC 5 6 2 1 F

■ LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Description	Part No.							Remarks
		A-307R				A-207R			
		MYXJ/EW	MYXJ/GR	SAMXJ	SDXJ	MYXJ/EW	MYXJ/GR	MVXJ	
NSP	AF COMPLEX ASSY	AWM7358	AWM7358	AWM7359	AWM7359	AWM7357	AWM7357	AWM7357	
	├ VOLUME ASSY	AWX7118	AWX7118	AWX7118	AWX7118	AWX7118	AWX7118	AWX7118	
NSP	├ HEADPHONE ASSY	AWX7114	AWX7114	AWX7114	AWX7114	AWX7114	AWX7114	AWX7114	
	├ AC PRIMARY ASSY	AWX7113	AWX7113	AWX7115	AWX7115	AWX7113	AWX7113	AWX7113	
	└ AF ASSY	AWX7119	AWX7119	AWX7119	AWX7119	AWX7117	AWX7117	AWX7117	
NSP	CONTROL ASSY	AWG7013	AWG7013	AWG7013	AWG7013	AWG7013	AWG7013	AWG7013	
	├ FRONT L ASSY	AWX7123	AWX7123	AWX7123	AWX7123	AWX7123	AWX7123	AWX7123	
	├ FRONT R ASSY	AWX7124	AWX7124	AWX7124	AWX7124	AWX7124	AWX7124	AWX7124	
	└ OPT ASSY	AWX7125	AWX7125	AWX7125	AWX7125	AWX7125	AWX7125	AWX7125	

A VOLUME ASSY

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	Q513,Q514		2SK246
	Q501-Q510		2SK303
	Q511		DTC124EK
	D505,D506,D509,D510		1SS352
	D501-D504,D507,D508		1SS355
CAPACITORS			
	C501,C502		CCSQCH271J50
	C513,C514		CEAT100M50
	C516		CEAT330M25
	C503,C504		CFTYA473J50
⚠	C515		CKCYF103Z50
	C511		CKSQYF473Z50
RESISTORS			
⚠	R530		RS1/10S100J
	VR501		ACX7021
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN501	16P SOCKET	KP200TA16L
	CN502	CONNECTOR 7P	KPE7
		PCB BINDER	VEF1040

B HEADPHONE ASSY

Mark	No.	Description	Part No.
CAPACITORS			
	C551,C552		CKSQYB392K50
OTHERS			
		3P CABLE HOLDER	51063-0305
	J552	CORD WITH PLUG	DE005WE0
	JA501	HEADPHONE JACK	RKN1002
	J551	JUMPER WIRE	D15A03-150-2651

C AC PRIMARY ASSY

(1) CONTRAST TABLE

AWX7113 and AWX7115 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7113	AWX7115	
	H3-H6 FUSE CLIP	Not used	AKR7001	
⚠	3P OUTLET	Not used	AKP1053	

(2) PARTS LIST FOR AWX7113

Mark	No.	Description	Part No.
SWITCH			
⚠	S801		ASG1035
CAPACITORS			
⚠	C801,C802 (0.01µF/AC250V)		ACG7020
OTHERS			
⚠	CN801	AC INLET	AKP7005
	H1,H2	FUSE CLIP	AKR7001

Mark	No.	Description	Part No.

D AF ASSY

(1) CONTRAST TABLE

AWX7119 and AWX7117 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7119	AWX7117	
	C451 (10000µF/42V)	ACH7048	Not used	
	C451 (6800µF/42V)	Not used	ACH7080	
	C452 (10000µF/42V)	ACH7049	Not used	
	C452 (6800µF/42V)	Not used	ACH7081	

(2) PARTS LIST FOR AWX7119

Mark	No.	Description	Part No.
SEMICONDUCTORS			
⚠	IC454 (1A)		AEK7009
⚠	IC453		BA178M06T
⚠	IC451		BA178M15T
⚠	IC452		NJM79M15FA
	IC101		TC9163AN
	IC301		UPC4570C
	IC151		UPC4570G2
	Q311,Q312,Q329,Q330		2SA1162
	Q337,Q338		2SA1162
	Q313,Q314,Q321,Q322		2SA1255
⚠	Q452		2SA1837
	Q309,Q310,Q327,Q328		2SC2712
	Q339,Q340		2SC2712
	Q315,Q316,Q319,Q320		2SC3138
	Q303,Q304		2SC3326
⚠	Q451		2SC4793
	Q341		2SC5174P
	Q101-Q104		2SK303
	Q151		DTA124EK
	Q152		DTC124EK
	Q153		DTC124ES
	Q331,Q332,Q343		DTC143EK
	Q333-Q336		DTC143ES
	Q317,Q318		IMX1
⚠	Q323,Q324		IRF530
⚠	Q325,Q326		IRF9530
	D101-D104,D151,D301-D310		1SS355
	D401-D404		1SS355
⚠	D451		D5SBA20
⚠	D452-D455,D459,D460		S5566G(TPB2)
	D461		S5566G(TPB2)
	D311,D312		UDZ15B
	D457,D458		UDZ36B
	D456		UDZ4.7B
	D341		UDZS5.1B
	D462		UDZS5.6B
COILS			
	L151-L154		LCTA221J3225
RELAYS			
	RY401-RY403		ASR7014

Mark	No.	Description	Part No.
CAPACITORS			
	C451 (10000µF/42V)		ACH7048
	C452 (10000µF/42V)		ACH7049
⚠	C329,C331		CCCSL101K2H
	C313-C316,C337-C340		CCSQCH121J50
⚠	C153,C154		CCSQCH151J50
	C303,C304		CCSQCH221J50
⚠	C163,C164		CCSQCH390J50
⚠	C101-C110		CCSQCH470J50
	C334		CEANP100M16
	C471		CEANP1R0M2A
	C172		CEANP1R0M50
	C333		CEANP470M10
	C155,C156,C167,C168		CEAT100M50
	C317-C320,C335,C336		CEAT100M50
	C453-C458,C465,C466,C469		CEAT100M50
	C461,C462		CEAT101M2A
	C467,C468		CEAT1R0M50
	C470		CEAT3R3M50
	C169,C170		CEAT470M25
	C459,C460,C463,C464		CEAT470M50
	C157,C158		CEAT471M6R3
	C301,C302,C305,C306		CEBA100M50
	C307,C308		CEBA221M25
	C321-C324		CFTYA224J50
	C173		CFTYA564J50
⚠	C330,C332		CKCYB331K2H
	C165,C166		CKSQYB222K50
	C111-C113,C171,C341		CKSQYF473Z50
⚠	C472		CKSQYF473Z50
	C159,C160		CQMA243J50
	C161,C162		CQMBA823J50
RESISTORS			
	R311,R312		RDR1/4VM152J
	R301,R302		RDR1/4VM240J
	R303,R304		RDR1/4VM561J
⚠	R143		RS1/10S100J
⚠	R133,R134,R171,R172		RS1/10S101J
⚠	R351-R354,R452		RS1/10S101J
⚠	R317,R318,R331,R332		RS1/10S122J
⚠	R357-R360		RS1/10S151J
⚠	R377,R378,R453		RS1/10S153J
⚠	R465-R470		RS1/10S161J
⚠	R361-R366		RS1/10S1R5J
⚠	R339-R346		RS1/10S221J
⚠	R454		RS1/10S273J
⚠	R460		RS1/10S2R2J
⚠	R355,R356		RS1/10S432J
⚠	R459		RS1/10S470J
⚠	R464		RS1/10S4R7J
⚠	R379,R380		RS1/10S682J
⚠	R451		RS1LMF270J
⚠	R401,R402		RS1LMF331J
⚠	R461-R463		RS1LMF390J
⚠	R403		RS1LMF821J
⚠	R373-R376		RS1LMFR22J
	VR301,VR302 (2.2kΩ)		VCP1123
	Other Resistors		RS1/10S□□□J

Mark	No.	Description	Part No.
OTHERS			
		3P CABLE HOLDER	51063-0305
		SCREW	ABA1007
		SCREW	ABA1052
	CN101,CN102	8P PIN JACK	AKB7023
		8P SPEAKER TERMINAL	AKE1011
		HEAT SINK M	ANH-813
		HEAT SINK B	ANH1021
	CN202	FFC CONNECTOR 19P	HLEM19S-1
	CN203	16P PLUG	KM200TA16
	JA401	REMOTE CONTROL JACK	RKN1004
		PCB BINDER	VEF1040
	KN101,KN201,KN301,KN451	EARTH METAL FITTING	VNF1084

E FRONT L ASSY

SEMICONDUCTORS

	IC751	UPC4570G2
	Q707,Q708	2SC1845
	Q705	2SC2712
	Q701-Q704	DTC124EK
	D704	1SS355
	D701,D703,D705	SLP9118C51H

SWITCHES

	S702-S704	ASG1034

CAPACITORS

	C753,C754,C761,C762	CCSQCH101J50
	C767,C768	CCSQCH221J50
	C751,C752,C755,C756	CEAL100M50
	C763,C764	CEALR10M50
	C759,C760	CEALR47M50
	C757,C758	CFTYA153J50
	C701	CKSQYF104Z25

RESISTORS

⚠	R751,R752	RS1/10S101J
	VR751,VR752 (30kΩ)	ACS7028
	Other Resistors	RS1/10S□□□J

OTHERS

		3P CABLE HOLDER	51063-0305
		7P CABLE HOLDER	51063-0705
		13P CABLE HOLDER	51063-1305
	J603	JUMPER WIRE	D15A03-100-2651
	J3	JUMPER WIRE	D15A07-200-2651

F FRONT R ASSY

SEMICONDUCTORS

	IC601	PD5443A
	Q609	2SA1162
	Q610	2SC2712
	Q611-Q613,Q615,Q616	DTA124EK
	Q601-Q606,Q608,Q614	DTC124EK
	D608-D612,D614-D621	1SS355
	D607	SLP6118C51H
	D601-D606	SLP9118C51H

SWITCHES

	S602,S603	ASG1034
	S601	ASX7008

CAPACITORS

	C602	CEAT102M6R3
	C604	CEJA2R2M50
	C603,C611	CKSQYF103Z50
	C607,C608	CKSQYF104Z25
	C605,C606,C610	CKSQYF473Z50

RESISTORS

	VR601 (500kΩ)	ACS7029
	Other Resistors	RS1/10S□□□J

OTHERS

	X601	CERAMIC RESONATOR (4.19MHz)	VSS1014
		13P CABLE HOLDER	51063-1305
	CN601	19P FFC CONNECTOR	9607S-19F
	J602	JUMPER WIRE	D15A13-125-2651

G OPT ASSY

OTHERS

	3P CABLE HOLDER	51063-0305
	REMOTE RECEIVER UNIT	GP1U27X

6. ADJUSTMENT

6.1 IDLE CURRENT ADJUSTMENT

- CAUTION : Heatsinks' (Q323–Q326) DC level is equal to +B or -B.
  Don't touch them or you will be electric shocked.

1. Connect the measuring instrument as shown in Fig.6-1. (R373 or R374)
2. Turn the POWER switch to ON.
3. Adjust VR301 (VR302) so that the voltage between both sides of R373 (R374) becomes 10mV ± 1mV.
4. Ages for 5 minutes.
5. Adjust VR301 (VR302) so that the voltage between both sides of R373 (R374) becomes 11mV ± 1mV.

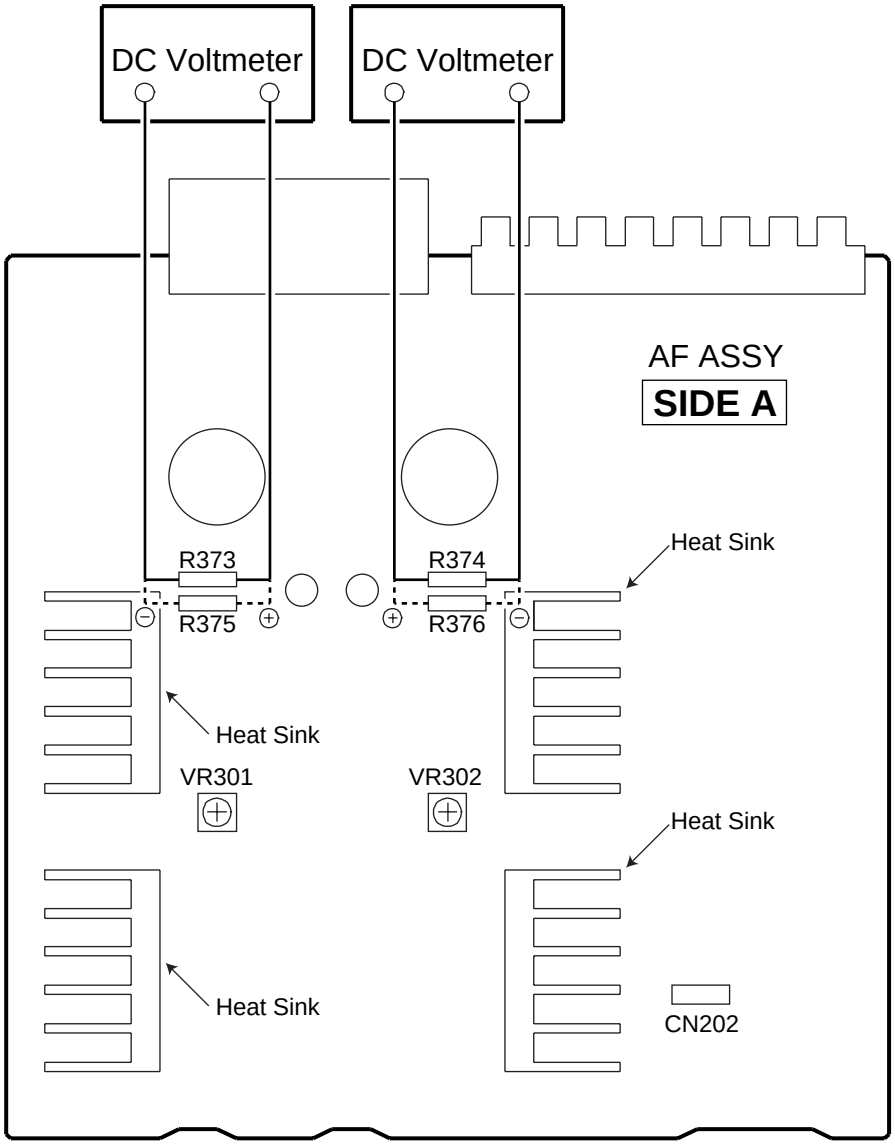


Fig.6-1 Adjustment Method

7. GENERAL INFORMATION

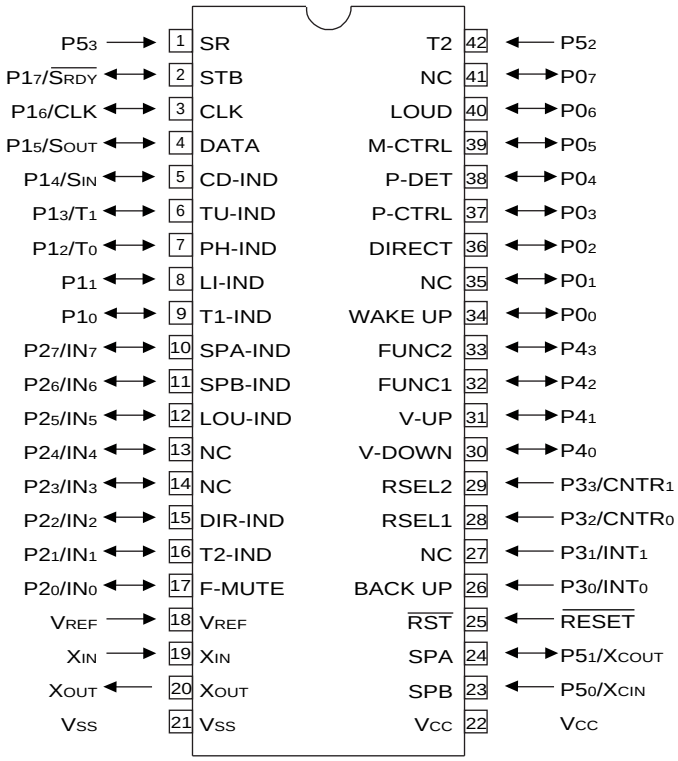
7.1 IC

■ PD5443A (FRONT R ASSY : IC601)

● REMOTE CONTROL AMP MICROCOMPUTER

● Pin Assignment (Top view)

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

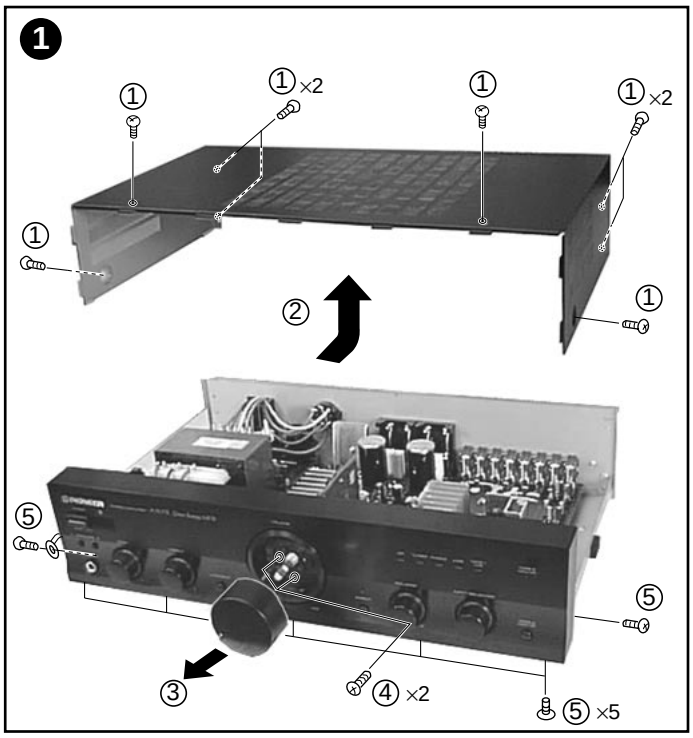


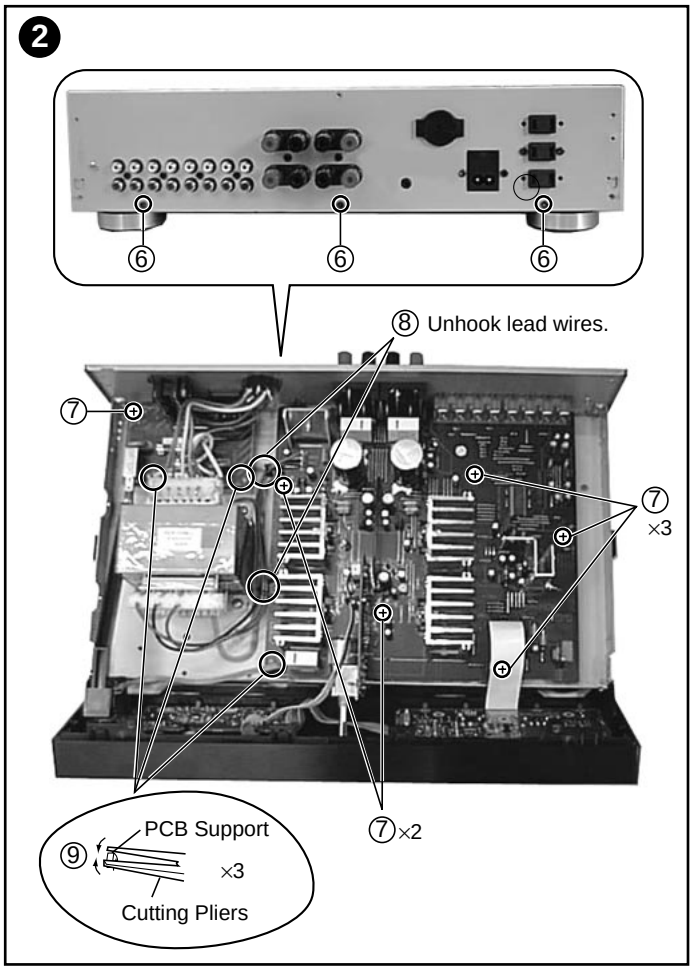
● Pin Function

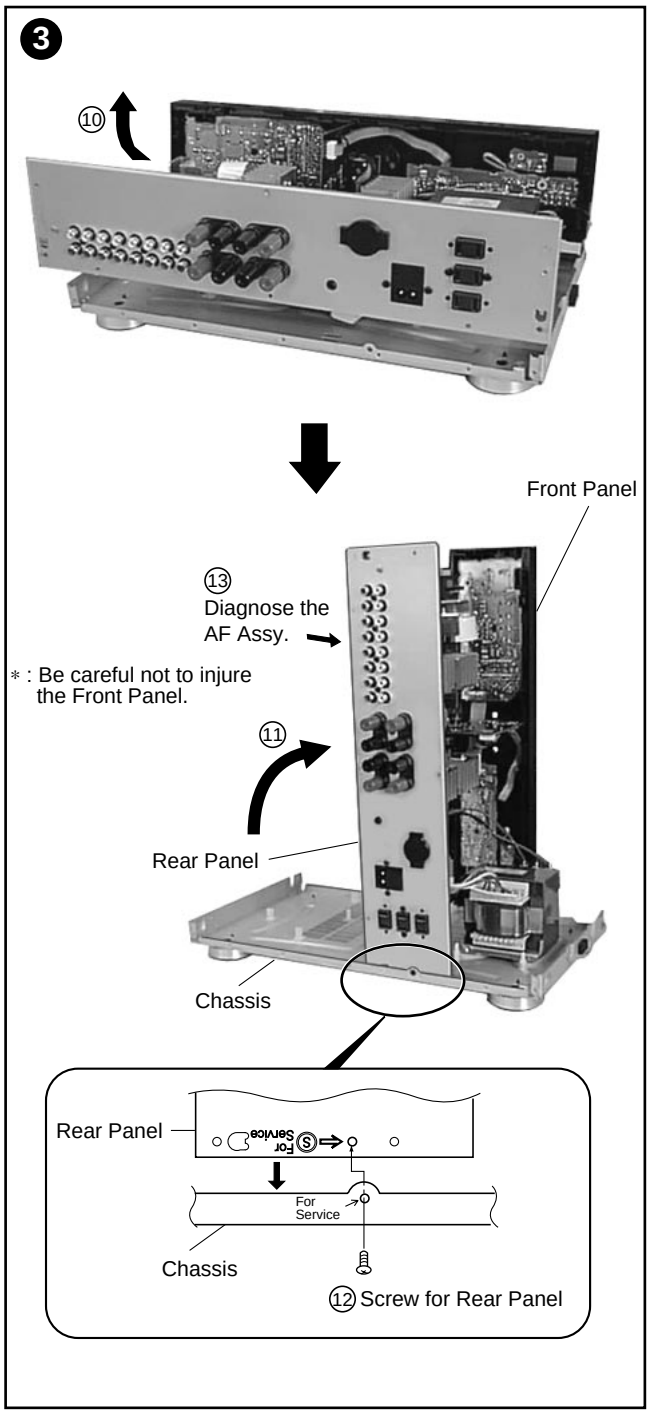
No.	Pin name	I/O	Function
1	$P5_3$	I	Remote control signal input pin.
2	$P1_7/\overline{S_{RDY}}$	O	STB for TC9163N.
3	$P1_6$/CLK	O	CLOCK for TC9163N.
4	$P1_5/S_{OUT}$	O	DATA for TC9163N.
5	$P1_4/S_{IN}$	O	CD INDICATOR.
6	$P1_3/T_1$	O	TUNER INDICATOR.
7	$P1_2/T_0$	O	PHONO INDICATOR.
8	$P1_1$	O	LINE INDICATOR.
9	$P1_0$	O	TAPE1 INDICATOR.
10	$P2_7/IN_7$	O	SPEAKER-A INDICATOR.
11	$P2_6/IN_6$	O	SPEAKER-B INDICATOR.
12	$P2_5/IN_5$	O	LOUDNESS INDICATOR.
13	$P2_4/IN_4$	O	Not used.
14	$P2_3/IN_3$	O	Not used.
15	$P2_2/IN_2$	O	DIRECT INDICATOR.
16	$P2_1/IN_1$	O	TAPE2 INDICATOR.
17	$P2_0/IN_0$	O	FUNCTION switch MUTE.
18	V_{REF}	I	Pulls up to 5V.
19	X_{IN}	I	4.19MHz .
20	X_{OUT}	O	Ceramic vibrating and connecting terminal.
21	V_{SS}	-	Digatal GND.
22	V_{CC}	-	Power supply +5V.
23	$P5_0/X_{CIN}$	I	SPEAKER-B KEY input.

No.	Pin name	I/O	Function
24	$P5_1/X_{COUT}$	I	SPEAKER-A KEY input.
25	$\overline{RESET}$	I	Reset pin.
26	$P3_0/INT_0$	I	BACK UP detection pin. interrupt specification.
27	$P3_1/INT_1$	I	Not used.
28	$P3_2/CNTR_0$	I	REC selector input 1.
29	$P3_3/CNTR_1$	I	REC selector input 2. interrupt specification.
30	$P4_0$	O	Volume DOWN data output.
31	$P4_1$	O	Volume UP data output.
32	$P4_2$	I	FUNCTION selector input 1.
33	$P4_3$	I	FUNCTION selector input 2.
34	$P0_0$	I	WAKE UP input. Key on wake up specification.
35	$P0_1$	O	Not used.
36	$P0_2$	I	DIRECT KEY input. Key on wake up specification.
37	$P0_3$	O	Protection control pin.
38	$P0_4$	I	Output error detection pin
39	$P0_5$	O	MUTING control pin.
40	$P0_6$	I	LOUDNESS KEY input. Key on wake up specification.
41	$P0_7$	O	Not used.
42	$P5_2$	I	TAPE2 KEY input.

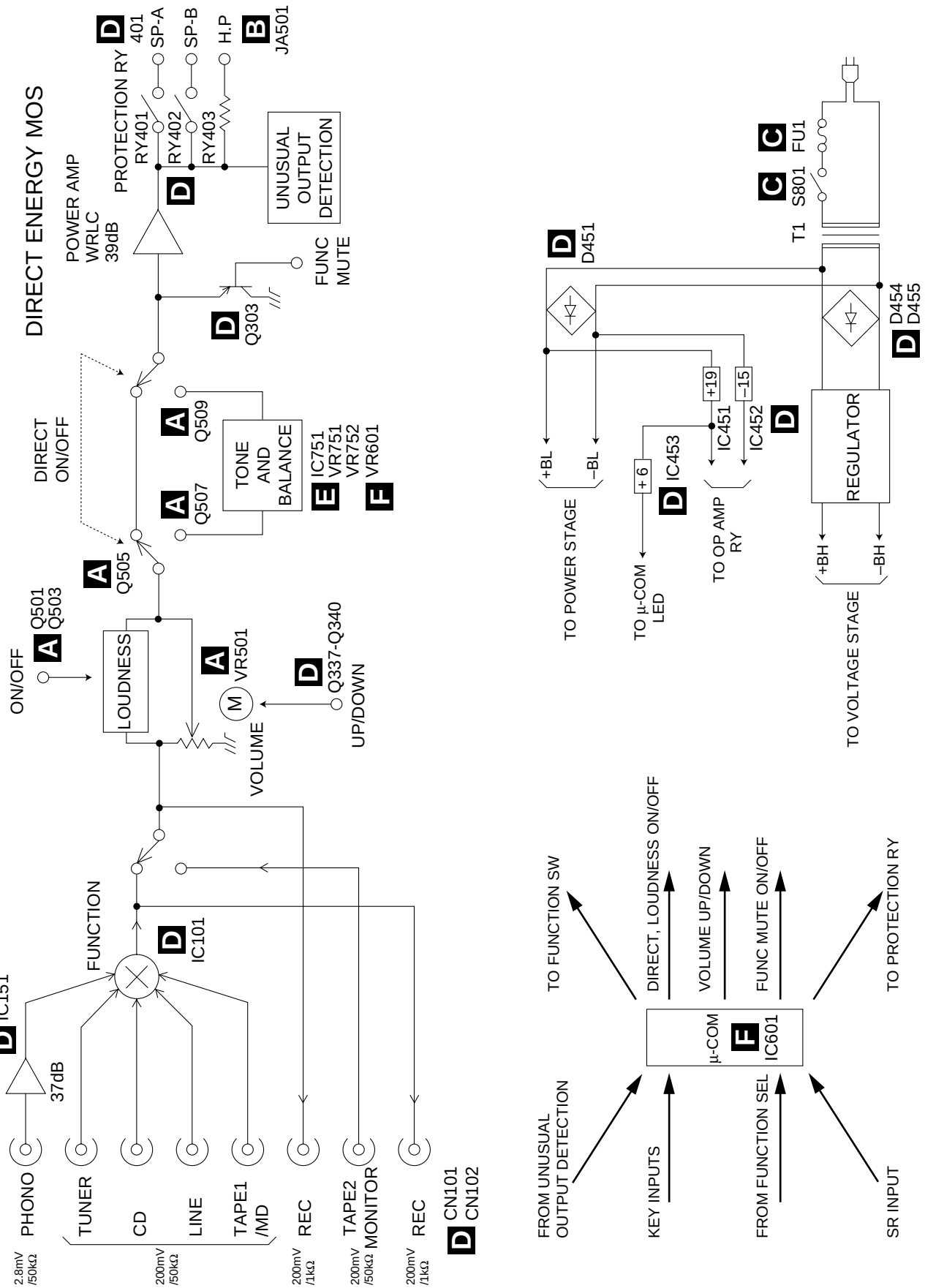
7.2 DISASSEMBLY







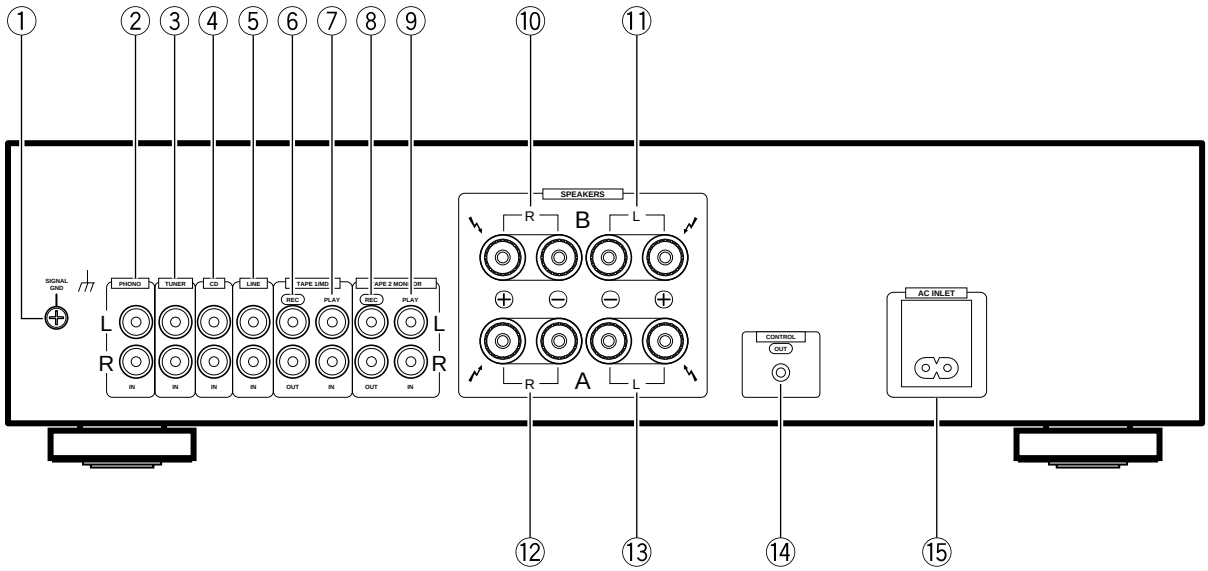
7.3 BLOCK DIAGRAM



8. PANEL FACILITIES AND SPECIFICATIONS

8.1 PANEL FACILITIES

■ REAR PANEL



① **GND (Turntable ground) terminal**

② **PHONO terminals**

③ **TUNER terminals**

④ **CD terminals**

⑤ **LINE terminals**

⑥ **TAPE 1/MD REC (OUT) terminals**

⑦ **TAPE 1/MD PLAY (IN) terminals**

⑧ **TAPE 2 MONITOR REC (OUT) terminals**

⑨ **TAPE 2 MONITOR PLAY (IN) terminals**

⑩ **SPEAKERS B terminals (Right channel)**

⑪ **SPEAKERS B terminals (Left channel)**

⑫ **SPEAKERS A terminals (Right channel)**

⑬ **SPEAKERS A terminals (Left channel)**

⑭ **CONTROL OUT jack**

This jack is for output of control signals when operating other components bearing the SR mark with the attached remote control unit.

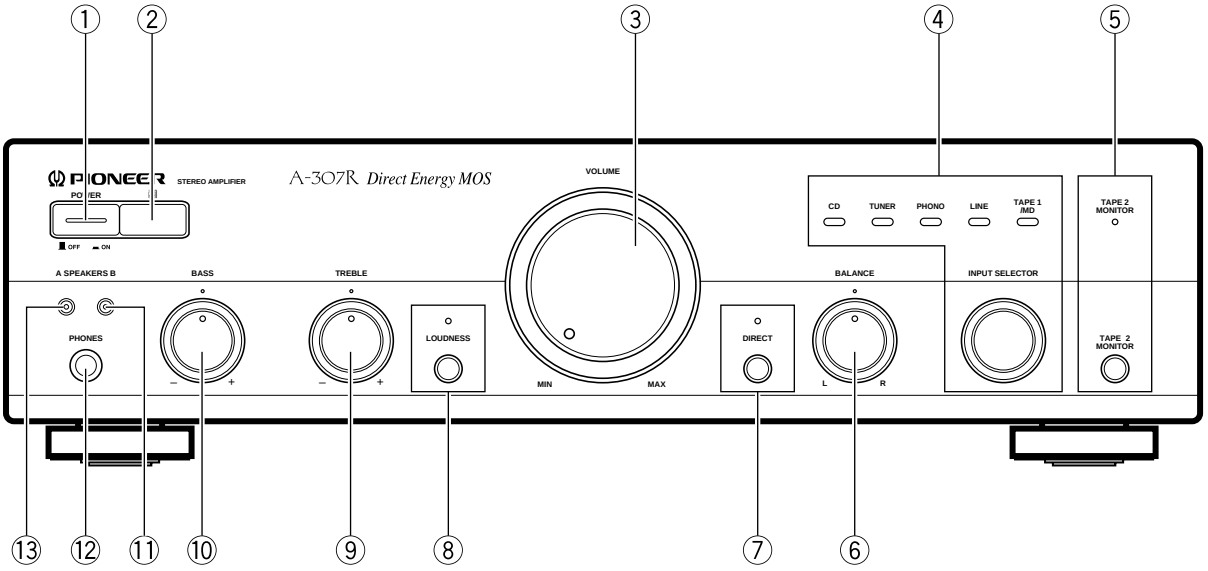
⑮ **AC INLET jack**

Connect power cord to here and an AC wall socket, or the AC outlet of an audio timer.
If you are going to be away from home for a long period of time, disconnect the unit from the wall socket.

NOTES:

- If you use an other power cord than provided, we cannot assume the liabilities in what may occur as a result of it.
- (The provided power cord has a current capacity of 2.5 A.)

■ FRONT PANEL



The illustration shows the A-307R.

① POWER (▮ OFF/▂ ON) switch

Press to turn power to the unit ON and OFF.
This unit cannot be turned ON and OFF using the remote control unit.

② REMOTE CONTROL SENSOR window

③ VOLUME control

Use to adjust the volume level.

④ INPUT SELECTOR knob/indicators

Turn the knob clockwise or counterclockwise so that the indicator lights for your desired input source. Turning the knob clockwise causes the lit indicator to right. Turning counter-clockwise causes it to left.

CD : For compact disc playback with a CD player.
TUNER : For AM or FM broadcast reception with a tuner.
PHONO : For record playback with a turntable.
LINE : Set to this position when listening to the program from a component connected to the LINE terminals.
TAPE 1/MD : For playback with a cassette deck or MD recorder connected to TAPE 1/MD terminals.

⑤ TAPE 2 MONITOR button/indicator

Use when there is an adaptor component (graphic equalizer, etc.) or cassette deck connected to the TAPE 2 MONITOR terminals.

On : Indicator lights when using the adaptor component or listening to the cassette deck.
Off : Indicator goes off when not in use.

NOTES:

- When no connections are made to the TAPE 2 MONITOR terminals, or when they are not in use, be sure to set this switch to the off position. (No sound will be heard if it is set to the on position.)
- When the TAPE 2 MONITOR indicator is on and the INPUT SELECTOR knob is not set to TAPE 1/MD, the signals which are input through TAPE 2 MONITOR are then output at TAPE 1/MD REC OUT.

⑥ BALANCE control

Should normally be left in the center position. Adjust balance if the sound is louder from one of the speakers. If the right side is louder, turn toward the L (left) position and if the left side is louder, turn toward the R (right) position.

NOTE:

This control does not operate when the DIRECT button is in the on position.

⑦ DIRECT button/indicator

Use this button when you do not wish to pass the output from input terminal equipment through the various frequency adjusting circuits (BASS, TREBLE, BALANCE, LOUDNESS).

On : The indicator lights: The signals passing through the input terminals are reproduced without passing through the various frequency adjusting circuits. This results in flat, pure sound which is a more faithful reproduction of the input source.

Off : The indicator goes off: The signal passes through the various frequency adjusting circuits.

⑧ LOUDNESS button/indicator

Use when listening at low volume levels.

On : The indicator lights: Boosts low and high frequencies to give added punch to playback even at a low volume level.

Off : The indicator goes off: Should normally be left in this position.

NOTE:

This button does not operate when the DIRECT button is in the on position.

⑨ TREBLE tone control

Use to adjust the high-frequency tone. The center position is the flat (normal) position. When turned to the right, high-frequency tones are emphasized; when turned to the left, high-frequency tones are de-emphasized.

NOTE:

This control does not operate when the DIRECT button is in the on position.

⑩ BASS tone control

Use to adjust the low-frequency tone. The center position is the flat (normal) position. When turned to the right, low-frequency tones are emphasized; when turned to the left, low-frequency tones are de-emphasized.

NOTE:

This control does not operate when the DIRECT button is in the on position.

⑪ SPEAKERS B (ON/OFF) button/indicator

Use this button to listen to the speaker system connected to SPEAKERS B terminals.

ON : The indicator lights. Sound is heard from the speaker system.

OFF : The indicator goes off. No sound is heard from the speaker system. Set to this position when listening with headphones.

⑫ PHONES jack

When using headphones, insert the plug into this jack.

NOTE:

The speakers continue to output sound even when headphones are plugged into this jack.
To mute the sound from the speakers, press the SPEAKERS button to OFF.

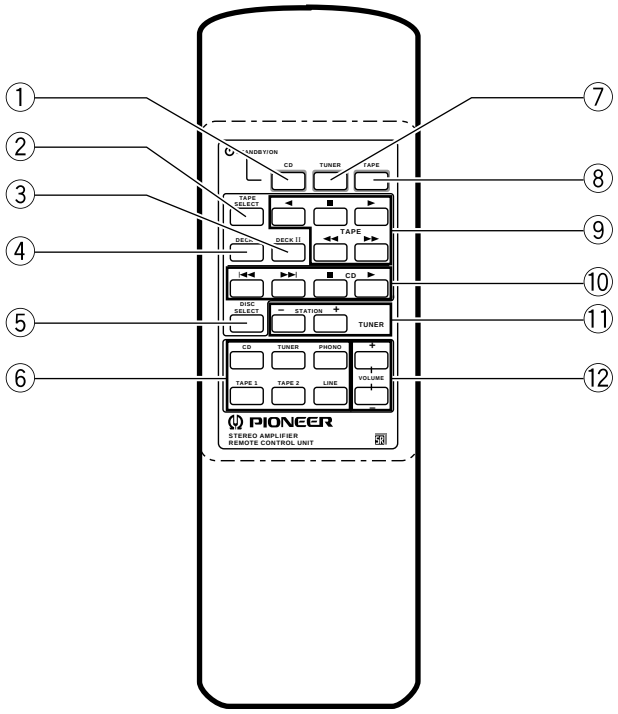
⑬ SPEAKERS A (ON/OFF) button/indicator

Use this button to listen to the speaker system connected to SPEAKERS A terminals.

ON : The indicator lights. Sound is heard from the speaker system.

OFF : The indicator goes off. No sound is heard from the speaker system. Set to this position when listening with headphones.

■ REMOTE CONTROL



① CD POWER button
Switches CD player power STANDBY/ON.

② TAPE SELECT button
Selects the cassette No. (1 to 6) for multi-cassette changer.

③ DECK II button
To operate Deck II, press this button before pressing the operating buttons. Also, when using a single deck, press this button before pressing the operating buttons.

④ DECK I button
To operate Deck I, press this button before pressing the operating buttons.

⑤ DISC SELECT button
Press this to select discs on a multi or twin tray compact disc player.

⑥ Input selector button
Use to select the playback source.

CD : For compact disc playback with a CD player.
TUNER : For AM or FM broadcast reception with a tuner.
PHONO : For record playback with a turntable.
TAPE 1 : For playback with a cassette deck or MD deck recorder connected to TAPE 1/MD terminals.
TAPE 2 : For playback with a cassette deck or adaptor connected to TAPE 2 MONITOR terminals.
LINE : For playback with a component connected to the LINE terminal.

⑦ TUNER POWER button
Switches TUNER power STANDBY/ON.

⑧ TAPE POWER button
Switches the cassette deck power STANDBY/ON.
(Can not turn ON/OFF some cassette decks.)

⑨ TAPE operation buttons
◄, ► : Playback in the direction of the arrows.
■ : Stop
◄◄, ►► : Tape fast forward/reverse.

⑩ CD player operation buttons
I◄◄ : Returns you to the start of the current track. (Track search)
►►I : Takes you to the start of the next track. (Track search)
■ : Stop
► : Play

⑪ STATION + (up), – (down) buttons
Calls each station number in sequence.

⑫ VOLUME + (up), – (down) buttons
+ ..... Increases the volume.
– ..... Decreases the volume.

NOTE:
When the accessory remote control unit is used to operate other Pioneer components with the SR mark, it cannot be used to operate functions which do not correspond to the functions listed on the remote control unit.

8.2 SPECIFICATIONS

Amplifier Section

Continuous power output
(both channels driven at 20 Hz to 20 kHz)∗∗
[A-307R]
T.H.D. 0.1 %, 8 Ω ..... 45 W + 45 W∗
T.H.D. 0.15 %, 4 Ω ..... 65 W + 65 W∗
[A-207R]
T.H.D. 0.1 %, 8 Ω ..... 35 W + 35 W∗
T.H.D. 0.15 %, 4 Ω ..... 45 W + 45 W∗
DIN Continuous power output
(both channels driven at 1 kHz)
[A-307R]
T.H.D. 1.0 %, 8 Ω ..... 55 W + 55 W
T.H.D. 1.0 %, 4 Ω ..... 80 W + 80 W
[A-207R]
T.H.D. 1.0 %, 8 Ω ..... 45 W + 45 W
T.H.D. 1.0 %, 4 Ω ..... 60 W + 60 W
Total harmonic distortion∗∗
[A-307R]
20 Hz to 20 kHz, 22.5 W, 8 Ω ..... 0.08 %∗
[A-207R]
20 Hz to 20 kHz, 17.5 W, 8 Ω ..... 0.08 %∗

- **Power output specification is for when power supply is 230V.**

Input sensitivity/impedance
PHONO (MM) ..... 2.8 mV/50 kΩ
CD, TUNER, LINE, TAPE 1/MD, TAPE 2 MONITOR
..... 200 mV/50 kΩ
PHONO (MM) overload level
1 kHz, T.H.D. 0.1 % ..... 150 mV
Output level/impedance
TAPE 1 REC, TAPE 2 MONITOR REC ..... 200 mV/1 kΩ
Frequency response
PHONO (MM) ..... 20 Hz to 20 kHz, ±0.5 dB
CD, TUNER, LINE, TAPE 1/MD, TAPE 2 MONITOR
..... 5 Hz to 100 kHz, $^{+0}_{-3}$ dB∗
Tone control
BASS ..... ±8 dB (100 Hz)
TREBLE ..... ±8 dB (10 kHz)
Loudness contour (volume control set at –30 dB position)
..... +6 dB (100 Hz)/+4 dB (10 kHz)
Signal-to-Noise ratio (IHF short circuit, A network)
PHONO (MM, 5 mV input) ..... 85 dB∗
CD, TUNER, LINE, TAPE 1/MD, TAPE 2 MONITOR
..... 106 dB∗
Signal-to-Noise ratio (DIN, continuous power/50 mW)
PHONO (MM) ..... 71 dB/67 dB∗
CD, TUNER, LINE, TAPE 1/MD, TAPE 2 MONITOR
..... 91 dB/71 dB∗

Power Supply/Miscellaneous

Power requirements ..... AC 220 – 230 V, 50/60 Hz
Power consumption
[A-307R] ..... 140 W
[A-207R] ..... 130 W
Dimensions (including knobs and other protruding parts)
..... 420 (W) x 114 (H) x 307 (D) mm
Weight (without package)
[A-307R] ..... 5.9 kg
[A-207R] ..... 4.7 kg

Accessories

Remote control unit 1
Batteries (AA/R6P) 2
Power cord (Rated current 2.5 A) 1
Operating instructions 1
Warranty card 1

NOTE:
Specifications and design are subject to possible modifications without notice, due to improvements.

∗ Measured with DIRECT button set to on.
∗∗ Measured by Audio Spectrum Analyzer.